



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

MSU International Development Working Papers

Market Information Sources Available Through the Internet: Daily to Yearly Market and Outlook Reports, Prices, Commodities and Quotes

by

Jean-Charles Le Vallée

**MSU International
Development
Working Paper No. 64
Updated June 1997**



**Department of Agricultural Economics
Department of Economics
MICHIGAN STATE UNIVERSITY
East Lansing, Michigan 48824**

**MSU Agricultural Economics Web Site: <http://www.aec.msu.edu/agecon/>
MSU Food Security II Web Site: <http://www.aec.msu.edu/agecon/fs2/>**

MSU INTERNATIONAL DEVELOPMENT PAPERS

Carl Liedholm and Michael T. Weber

Editors

The MSU International Development Paper series is designed to further the comparative analysis of international development activities in Africa, Latin America, Asia, and the Near East. The papers report research findings on historical, as well as contemporary, international development problems. The series includes papers on a wide range of topics, such as alternative rural development strategies; nonfarm employment and small scale industry; housing and construction; farming and marketing systems; food and nutrition policy analysis; economics of rice production in West Africa; technological change, employment, and income distribution; computer techniques for farm and marketing surveys; farming systems and food security research.

The papers are aimed at teachers, researchers, policy makers, donor agencies, and international development practitioners. Selected papers will be translated into French, Spanish, or other languages.

Individuals and institutions in Third World countries may receive single copies of papers published since 1993 free of charge. Requests for copies and for information on available papers may be sent to:

MSU Bulletin Office
10-B Agriculture Hall
Michigan State University
East Lansing, Michigan 48824-1039
U.S.A.

Information concerning how to purchase MSU International Development Papers is included in the back of this publication and requests should be sent to:

MSU Bulletin Office
10-B Agriculture Hall
Michigan State University
East Lansing, Michigan 48824-1039
U.S.A.

**MARKET INFORMATION SOURCES AVAILABLE THROUGH THE
INTERNET: DAILY TO YEARLY MARKET AND OUTLOOK
REPORTS, PRICES, AND COMMODITIES AND QUOTES**

by

Jean-Charles Le Vallée

Updated June 1997

This paper is published by the Department of Agricultural Economics and the Department of Economics, Michigan State University (MSU). Funding for this research was provided by the Food Security II Cooperative Agreement (AEP-5459-A-00-2041-00) between Michigan State University and the United States Agency for International Development, through the Office of Economic and International Development, through the Office of Economic and Institutional Development in Economic Growth Center of the Global Bureau.

Jean-Charles Le Vallée is a Visiting Research Specialist in the Department of Agricultural Economics at MSU. His email address is: levallee@pilot.msu.edu

ISSN 0731-3438

© All rights reserved by Michigan State University, 1997.

Michigan State University agrees to and does hereby grant to the United States Government a royalty-free, non-exclusive and irrevocable license throughout the world to use, duplicate, disclose, or dispose of this publication in any manner and for any purposes and to permit others to do so.

Published by the Department of Agricultural Economics, Michigan State University, East Lansing, Michigan 48824-1039, U.S.A.

CONTENTS

<u>Section</u>	<u>Page</u>
0. GOPHERS TO WORLD WIDE WEB, LINKS AND EMAIL, WHAT IN THE WORLD IS THE INTERNET?	1
1. INTRODUCTION	3
2. INTERNET SOURCES ON MARKET INFORMATION	5
2.1. Market Reports	5
2.1.1. USDA Market Wire Service, Agricultural Marketing Service, and Economics and Statistics System	5
2.1.2. International and World Markets	6
2.1.3. Africa	9
2.1.4. Inside the U.S.	11
2.1.5. Specific Commodities	12
2.2. Markets, Exchanges and Quotes	14
2.3. Links and Other Sources	16
2.4. Email and Discussion Groups	18
2.5. Weather, Farm Journals and A Currency and Unit Converter	19
2.5.1. Weather	19
2.5.2. Journals	20
2.5.3. Currency and Unit Converter	20
APPENDIX A	21
APPENDIX B	23

0. GOPHERS TO WORLD WIDE WEB, LINKS AND EMAIL, WHAT IN THE WORLD IS THE INTERNET?

Many forms of communication and presentations of information are available through the Internet. A wide range of resources can be found which describe thoroughly the endless and ever growing possibilities of forms and ways in which to communicate through information technology. Many resource guides for the Internet have been written and are, of course, available on-line. Rudimentary, this section will only look at and briefly explain the terms which are referred to often in this guide.

The Internet is like a spider's web in which information is made available at connecting points in the web by institutions, organizations and people who choose to provide this information. These connecting points are called Internet sites, web sites, or servers. To obtain information from the web, you must connect to a server or web site. Each server has its own address which is called a Universal Resource Locator or URL. You can reach an Internet site or server by opening a connection to a specific URL. Other sites can then be reached from this site by using hypertext links or again by opening another connection. The hypertext links, or pointers, are usually of different color from the rest of the text and are underlined. By choosing a particular hypertext link, you have requested information from a particular section, or page, of one Internet site (connecting point in the spider's web). You are viewing this information by using a browser. A browser is the navigational software used to surf the Internet, such as Netscape, Internet Explorer, Qmosaic and others. The information is downloaded to you from the server through the Internet.

The WWW or World Wide Web can take on the form of text documents, images, sounds, movies, programs and more. Although the information received through the Internet can come in various shapes and forms, and through a vast range of resources, by following the links mentioned in this guide, the information provided will come in the forms of: (1) HTML documents or web pages in web sites, which means documents with image, color, sound and animation capabilities (or text only versions for DOS/terminal-like computer screens), and (2) subject trees in gopher sites. For gopher sites, you can access information through a classification of subjects, or search for keywords in the various menu titles as well. At web sites, the very first page is often called the homepage. If you wish to visit the same web page often, you can set up a permanent link in your browser's memory by bookmarking the URL. This way you can directly access the web page without having to search for the correct URL.

Not discussed in this guide, other sources of information can be obtained through the Internet using resources such as:

- **Telnet (simple form of connection),**
- **FTP (file transfer protocol, e.g., to download programs),**
- **Usenet (newsgroups and archives of discussions). For questions, indexes, descriptions and information on how to join, go to:**

<http://sunsite.unc.edu/usenet-b/home.html>

- **Veronica (index to gopher sites, heavily used and hard to connect to). Good content, you should try multiple sites as content varies. For more information on Veronica servers go to:**

<gopher://gopher.tc.umn.edu:70/11/Other%20Gopher%20and%20Information%20Servers>

Another way to communicate through the Internet is by electronic mail or email. Primarily meant to exchange messages and information, the use of email has flourished into mailing lists or discussion groups (different from Usenet newsgroups), and are often referred to as a listserv, listproc or majordomo. By joining these email-based discussion groups, you can receive up-to-date information or questions, or post them to the list yourself. They can be a good source of information and publicity. You can also view the archives of past discussions.

For those who do not have access to the WWW, another possibility for the use of email is to download or request information from the WWW as text, images, and files in different formats such as pdf (portable document file, also called Adobe Acrobat format), simply by giving the URL. Thus, you may have access to any information available on the WWW! A good example could be daily markets prices. Via W3Gate, you can fetch multimedia documents from the WWW. To do so, send an email addressed to w3mail@gmd.de with requests for a WWW document denoted by an URL in the body of the message. Documents and files under protocols like http, ftp, wais, or gopher may be downloaded. For full instructions on how to use the various options, you can send an email addressed to w3mail@gmd.de with help in the body of the message or you can visit their web site at:

<http://www.gmd.de/IMK/NW/VaS/InformationServices/Projects/w3gate.en.html>

Of the thousands of lists, a few of the related lists to market information will be presented in this guide. For those who would like to search for interesting mailing/discussion lists, one of the better sites for descriptions, subscriptions and questions can be found at “Inter-Links” of Nova Southeastern University. Their URL is:

<http://www.nova.edu/Inter-Links/listserv.html>

1. INTRODUCTION

The WWW, along with email, are simple forms of information technology which have become easily accessible through the Internet. They offer great sources of up-to-date information and data-sets of all kinds. They allow you to get in contact, communicate and exchange information in electronic form. Of particular interest are the increasing number of web sites which pertain to agriculture and notably to markets. You may find quotes on futures within 10 minutes of their actual calls, and you may also find outlook reports on specific commodities for the years to come.

This paper serves as a guide to these different sources on market information presently available on the Internet¹. These sources may be daily, weekly, monthly or yearly reports, outlook reports, commodity reports or quotes from different exchanges. These reports may also be set up so that you may receive them directly into your email. Also, you may choose to take part in discussion groups. Other web sites are of great value and offer hundreds of links to related sites. A few of these sites are presented in this paper.

This guide may be of use to agricultural economists, market information analysts, librarians, and others who are interested in market information. Although the paper concentrates partly on grains, many of the same references to web sites in this paper refer to many other types of commodities that may be of interest. Certain commodities were chosen to help market specialists in Africa gain pertinent market information on these commodities rapidly through the Internet. Miscellaneous types of information-related web sites have also been included in this paper which may help outlook purposes such as up-to-date weather and through electronic mail.

You may also obtain a copy of this guide through the Food Security II Project web pages at the Department of Agricultural Economics' web site, of Michigan State University. The site can be reached at:

http://www.aec.msu.edu/agecon/fs2/market_information.htm

¹ The WWW evolves rapidly and new web sites are created every day. Web sites may also disappear, change address (URL) or content. Please note that the many references to web addresses in this paper were prepared beginning August 26, 1996. The web sites that you may choose to visit should be updated regularly.

2. INTERNET SOURCES ON MARKET INFORMATION

2.1. Market Reports

This sub-section covers all sites which offer market data and information from daily closing prices to weekly, monthly and yearly market reports. They differ by the information, data-banks and reports provided at each Internet site, by their sources of information, by the regions covered or by commodities. This Market Reports sub-section has five areas: (1) USDA market wire service, agricultural marketing service, and economics and statistics system, (2) international and world markets, (3) Africa, (4) within the United States of America, and (5) specific commodities such as maize, soybeans, fruits and vegetables, hogs and cattle.

2.1.1. USDA Market Wire Service, Agricultural Marketing Service, and Economics and Statistics System

One of the best sources for daily to weekly reports for all kinds of commodity prices, bids, imports and exports in the U.S., from dairy, feedstuffs, fruits and vegetables, futures, grains, hay, livestock, meat, poultry, tobacco, to international and other reports, is provided by the USDA market wire service. The University of Kentucky College of Agriculture, through the USDA Market News Service, offers a gopher site for daily market information and can be found at:

gopher://shelley.ca.uky.edu:70/11/agmkts/market_wire

An example of the selection of information on grains is shown in the appendix. This information for grain is also organized by state and nationally by the University of Nebraska-Lincoln's Institute of Agriculture and Natural Resources' web site at:

<http://ianrwww.unl.edu/markets/grain.htm>

Another good web site is the Market Information System (MIS) developed by the University of Florida. It provides agricultural market information received from the USDA Agricultural Marketing Service (AMS). It covers many commodities such as grain, and data is given by city. You may find their site at:

<http://gnv.ifas.ufl.edu/~MARKETING/MARKET.html>

The Market Wire Service is also available from the Advanced Information Technology Network's web site based in Fresno, California, which includes market information on rice. This site can be reached at:

<http://caticsuf.csufresno.edu:70/1/atinet/agmarkets> (down at present)
In the meantime, try <http://www.atinet.org/toc.html>

To obtain market information reports and data-sets from the Economic Research Service (ERS), the National Agricultural Statistics Service (NASS) and the World Agriculture Outlook Board (WAOB), go to the Albert R. Mann Library at Cornell University. Set up in collaboration with the USDA Economics and Statistics System, their gopher site and web site can be reached at (the gopher site is usually quicker):

<gopher://usda.mannlib.cornell.edu:70/>
<http://usda.mannlib.cornell.edu/usda/usda.html>

This site includes more than 140 agricultural data-sets, most in spreadsheet format. You can find data on subjects such as worldwide textile fiber production, farm production expenses, European Community wheat supply, milk and dairy product sales, food spending in American households, U.S. meat supply and consumption, fertilizer use, ozone records for the Northeast, and so on. The site also includes more than 100 report series. Searching the system, you can find reports about U.S. agricultural income and finance, farm production expenses, dairy production, industrial uses of agricultural materials, agricultural trade update, livestock inventory, and also world agricultural supply and demand estimates and outlook reports.

Looking at wheat for example, monthly update and outlook reports can be found on supply, disappearance, tariffs, quotas, area, price, stocks, inspections, trade and cash prices for leading classes of wheat at U.S. markets. Many annual reports are also available.

For those interested in world agricultural supply and demand estimates, full-text monthly reports provide the most current USDA forecasts of U.S. and world supply-use balances of major grains, soybeans and products, cotton, and much more. All of these reports may also be emailed directly to you free of charge. More information on this service can be found in section 2.4.

2.1.2. International and World Markets

The Foreign Agricultural Service (FAS) offers regularly many current commodity analysis reports on world markets and trade for different commodities such as grains and tropical fruits. The site is worth visiting from time to time to see what is newly available. It may be found at:

<http://ffas.usda.gov/fasprograms/fas-commodity/current.html>

You may also search through their market research page, where you can find country reports prepared by FAS attaches covering nearly 130 countries. You may also look through their “Trade Leads” section reported daily, and read their food market overviews which provide valuable information about some of the United States' most important export markets. You can also find out how to subscribe to the “Foreign Buyers List” compiled by FAS overseas staff, or review

their market-specific reports providing detailed information on marketing certain products in specific countries. These web pages can be found at:

<http://ffas.usda.gov/ffas/markres.html>

Another interesting tool at the FAS web site is the U.S. import and export statistics for bulk, intermediate and consumer-oriented foods and beverages (BICO). You may search by specific commodity or by country. Their web page can be found at:

http://ffas.usda.gov/cgi-bin/bico_form.pl

The Food and Agricultural Organization (FAO) of the United Nations has also a very good web site. Available through the site are many great features and related information sources. For example, follow their Global Watch series of pages, and in one you will find global information on early warning systems for sub-Saharan Africa: food outlook, food shortages, food crops and supplies, crop prospects and situations, as well as Sahel weather and special alerts. Also, world food outlook reports on cereals come out every two months. Be sure to look up their web pages on the World Food Summit held in Rome in November 1996.

Another great web page at the FAO site is the FAOSTAT Agriculture Statistics Database which contains time-series data (starting from 1961) for over 210 countries and 1500 items on the production and trade of primary and derived crops and livestock products; agricultural machinery; fertilizer, pesticides and insecticides (trade only); land use, population and food aid. For example, if you wanted to compare FAO statistics for wheat production over the last five years between the U.S., Canada, Argentina and Australia, you can simply request this information from their database and within a minute(s), the application gives the comparison between production, area harvested, yield, and so on, of those countries in the order selected. You can then download a copy in worksheet form!

Finally, among other related sources and links, the FAO has started setting up web pages on agricultural marketing, food outlook and yearly commodity market reviews. The Agricultural Support Systems Division of FAO (AGS) carries out work in agricultural marketing, agricultural machinery, tools and equipment, agricultural processing, farming systems and farm management, post-harvest management and rural finance. For example, they helped set up the web site on market information in Zambia. In the food outlook section you will find quarterly information on the world cereal situation, supply and demand, current production and prospects, trade, carryover stock, fertilizer data, export prices and freight weights. And in the commodity market review section, you can access economic data from the past few years with reasons for the variations and changes as well as some forecasting. These web pages cover many commodities such as beverages, sugar, bananas and citrus, cereals and cassava, oilseeds, oils and oilmeals, livestock and milk products, agricultural raw materials such as for cotton, fishery products and forestry products.

The FAO homepage can be reached at:

<http://www.fao.org/>

For the page on agricultural marketing go to:

<http://www.fao.org/waicent/faoinfo/agricult/ags/ags.htm>

For the FAOSTAT database and producer prices, go to:

http://apps.fao.org/lim500/Agri_db.pl

For the Commodity Market review, the URL is:

<http://www.fao.org/waicent/faoinfo/economic/esc/escp/cmr/httoc.htm>

For the GIEWS quarterly food outlook web pages, the URL is:

<http://www.fao.org/giews/english/fo/fotoc.htm>

All the GIEWS publications, including food crops and shortages, food supply situation and crop prospects in sub-Saharan Africa, the Sahel weather and Special Reports and Alerts are available at:

<http://www.fao.org/giews/english/giewse.htm>

The last three sites can be found starting with the FAO's Economic and Social Department at:

<http://www.fao.org/WAICENT/faoinfo/economic/>

For the Global Watch web pages go to:

<http://www.fao.org/news/global/glolib-e.htm>

And for the World Food Summit web pages, go to:

<http://www.fao.org/wfs/homepage.htm>

The World Bank offers some commodity price data in their data, analysis and forecasts section, in what is known as the "Pink Sheet." These monthly reports offer only a few data on food and represent annual averages over the last three years. Of interest, you may also find some interesting data on global economies, social indicators, balance of payments, and so on. Their site can be found at:

<http://www.worldbank.org/html/dec/Data/home.html>

Another web site contains recent baseline projections produced by the Food and Agricultural Policy Research Institute (FAPRI) for the U.S. agricultural sector and international commodity markets. Their agricultural outlook reports reach past the year 2003/2004 and cover many commodities in U.S. and world trade. Their data are available in spreadsheet form as well as in graphics. Their web site can be reached at:

<http://www.ssu.missouri.edu/SSU/FAPRI/reports/195/intro/outlook.htm>

The North American Agricultural Marketing Officials (NAAMO) try to promote education, communication and cooperation and enhance worldwide market opportunities for North American agricultural products. The NAAMO Discussion Area has been created for use by state (U.S.) and province (Canada) agricultural marketing officials as a means of communication through the Internet. It is intended to be a forum to post questions, views, problems, comments, and advice. Their site can be found at:

<http://www.naamo.org/naamo/>

The Commodity Futures Trading Commission in the United States has a web site with commitments of traders and other reports from its Division of economic analysis. The site has been organized by market and by exchanges. Their universal resource locator (URL) is:

<http://www.cftc.gov/dea/cot.html>

2.1.3. Africa

At present, web sites on market information within Africa are hard to find. But we can expect more web sites soon, as the Southern African Confederation of Agricultural Unions agreed at their 1996 conference to promote the networking of information between organized agriculture in the subregion.

For now, Internet sites for Zambia, Zimbabwe and South Africa are available. Market information in Zambia is available through its National Farmers' Union's web site where you can find an agricultural commodity exchange, or ACE, which produces a weekly market report, including CIF Lusaka based price information, and a monthly bulletin of prices in the more remote rural areas. You may find such commodities as white maize, sorghum and other grains as well as soybeans, nuts, etc. You may find their web site at:

<http://www.zamnet.zm/zamnet/znfu/welcome.html>

and to go to the ACE

<http://www.zamnet.zm/zamnet/znfu/acew.html>

Apart from the ACE site, the Ministry of Agriculture market information service also has a gopher site which can be reached at:

<gopher://lechwe.zamnet.zm:70/11/Agriculture>

In Zimbabwe, you may start on their homepage where you can find the links to market information, commodities, inputs and weather, as well as other related links at:

<http://www1.samara.co.zw/CFU/index.html>

For South Africa, the South African futures market (SAFEX) has a lot of information available and consists of financial and agricultural divisions. To reach the SAFEX web site, go to:

<http://www.safex.co.za/>

But for those interested in obtaining the data directly, link to:

<ftp://mail.safex.co.za/pub/>

Apart from SAFEX, other stock exchanges in Africa do exist. Although market information is hard to find, for those interested, exchanges for over 18 countries are listed at Mbendi's site:

<http://mbendi.co.za/exaf.htm>

For other links to agricultural resources in South Africa, the best place to start could be the South African Agriweb (or agricultural index and directory) and the Virtual Agricultural Trading and Information Centre at Agrilink. They both have a good number of links, and the latter has an on-line commodity exchange. Their URLs are:

<http://www2.nis.za/jm/agriweb.htm> (down at present), try <http://www.agric.za/>
<http://www.agrilink.agric.za/> (down at present), try <http://www.agric.za/>

Other sources of information on Africa can be found on other well organized web sites depending on what you are looking for. The USAID has an excellent site for regional information on Africa. Available through their site is the Africa Data Dissemination Service, AfricaLink, Famine Early Warning System, Horn Information Exchange, Initiative-Africa GII Gateway and information on natural resources management. Some market information is available such as food and calorie production, food aid, and so on. You may download agricultural statistics for each African country through their data dissemination service or find reports on food security, production or aid through other links, such as teff production for Ethiopia or calorie production in the Sahel. Through the famine early warning system, monthly country updates are available as well as special reports. For example, you can find a report on "Maize meal prices continue to fall in Zambia" for

the month of July 1996. The AfricaLink section has good information on Internet service providers (ISP), connectivity and costs in Africa. Their web site is located at:

<http://www.info.usaid.gov/regions/afr/>

The World Bank has set up web pages on Africa that offer special reports, based on recent bank-sponsored research, such as “Ensuring Food Security in Mali” in their Findings section, or you may also read infobriefs on best practices. Reports do not necessarily pertain to agriculture but cover many subjects. You may find their site at:

<http://www.worldbank.org/aftdr/findings/grhtmap.htm>

Apart from the USAID AfricaLink site on ISP, the state of advancement and availability of information technology for Africa, another good site is the Network Startup Resource Center, which not only covers each country but has set up pages on conferences, what’s to come, declarations from governments, and also ISP. Their web site can be reached at:

<http://www.nsrc.org/>

A second site is the African Internet Development Action Team’s page on ISP. Their page has less information and is not updated regularly. This site can be reached at:

<http://www.aidat.org/aidat/isplstaf.html>

2.1.4. Inside the U.S.

For the United States, many web sites exist that offer local state information for different commodities through university extension services, exchanges and boards of trade. A good site is the Advanced Information Technology Network, which has done a great job of putting together links to agricultural information, notably for California. The web site is based in Fresno, but has daily, weekly and montly news reports at state, national and international levels. This is a good place to start, and checking all the links, such as AgOne, the Attache reports, etc., is recommended. The network can be reached at: (trade and market information are down)

<http://www.atinet.org/toc.html>

For grain, a very good site is the Minneapolis Grain Exchange’s web page on links to cash market reports, with data from the Minneapolis, Portland and St. Joseph, MO, AMS Offices as well as a link to all AMS Grain Market Reports. This site can be found at:

<http://www.mgex.com/wheat/whtcash.htm>

For all commodities, another good place to start is a web site in Arizona where you can find a page on market news and data organized by state and on a few other countries. It covers many commodities randomly and pays close attention to fruits and vegetables. You can reach this site at:

<http://ag.arizona.edu/AREC/mnews/Amarket.html>

Daily Iowa cash grains and closing futures prices in commodity market reports are offered by the Iowa State University Extension, and this site has a couple of good links. Their URL is:

<http://www.exnet.iastate.edu/Information/market.html>

Or you might want to read up on Illinois extension service's weekly outlook ag-newsletter at:

<gopher://cesgopher.ag.uiuc.edu:73/11/CES-News/Ag-Newsletters/Weekly-Outlook>

And for agricultural-news on the state itself, you may simply try:

<gopher://cesgopher.ag.uiuc.edu:73/>

As well, weekly market data sheets for Missouri may be found through the University of Missouri's "Agricultural Electronic Bulletin Board" of its Commercial Agriculture Extension Program. Their site can be reached at:

<gopher://etcs.ext.missouri.edu:70/11/agebb>

2.1.5. Specific Commodities

Maize: To know all about maize and its production, or simply to look for maize resources for students, producers and specialists, one of the best sites is the maize page. Technical, germoplasm, production costs and other information are available, including many good links. You can find this web site at:

<http://www.ag.iastate.edu/departments/agronomy/cornpage.html>

Soybeans: Probably the best web site for soybean information is StratSoy. StratSoy is an information and communication system for the United States soybean industry, funded by the United Soybean Board, developed and maintained by the University of Illinois. Nice site, their URL is:

<http://www.ag.uiuc.edu/~stratsoy/>

Fruits and vegetables: For market information on fruits and vegetables, a couple sites are of particular interest: one is the Market Information System (MIS) developed by the University of Florida, FruitNet in South Africa, the Global Agribusiness Information Network and the Today's Market Prices web site. Although the MIS web site also covers many other commodities, you may find terminal market prices for fruits and vegetables for different cities around the world. They take their information from the USDA Agricultural Marketing Service (AMS). You may find their site for terminal market prices for fruits and vegetables at:

<http://gnv.ifas.ufl.edu/~MARKETING/tmpcmenu.html>

Calling itself “The Global HomePage for the Fruit & Vegetable Trade,” FruitNet's objective is to supply up-to-date and accurate prices of fresh fruits and vegetables in the main European and South African markets. You may find the latest Johannesburg market prices as well as daily market prices of certain areas of the world if you follow the London report link. You may reach FruitNet at:

<http://www.fruitnet.co.za/>

The Global Agribusiness Information Network offers world market information and reports on tropical horticultural products such as papaya, mango, vanilla, avocado, and so on. They also offer access to articles from periodicals such as “Tropical Produce Marketing News” and “Market Asia.” You may also link up to wholesale price reports covering North America and Europe. You may also want to check out their other agricultural links. You can reach their site at:

<http://www.milcom.com/fintrac/>

“Today's Market Prices” is a commercial site devoted to agricultural information on fruits and vegetables. They have price data on non-traditional commodities from the United States, Canada, Mexico, Europe and Latin America classified by product, variety, size and origin. The market information is presently free but this provider is planning to apply a monthly fee for the service which will include new features such as a historic and comparative database, along with reports, charts, statistics, graphs and tables, and useful information about the topic including a web page on a good number of links for agribusiness in their green net section. You can reach their site at:

<http://www.todaymarket.com/>

Hogs: A good site to start is the Packer's Trading Company's hog marketing forecast web page. Based in Chicago, they use the Chicago Mercantile exchange for settlement prices. They can be found at:

<http://www.agfutures.com/index.html>

Cattle: For U.S. live and feeder cattle cash and futures markets as well as daily market reports, try the Texas based trading floor at:

<http://www.agcenter.com/markets.htm>

Cotton: World cotton prices are taken from the Cotlook A and B indices. For market summaries, trends and graphs, Cotlook daily, cifquotes and the indices, try Cotlook Limited's web pages at:

<http://www.cotlook.com/english/online.htm>

The International Cotton Advisory Committee (ICAC) also has web pages under their cotton information section that include many papers, graphs and trends, mailing lists, and supply and use by country. To obtain the latest market information and monthly updates, you must pay for the service. The rest of the site is free and most is available in pdf format (Adobe acrobat reader). You can find ICAC at:

<http://www.icac.org/icac/english/main.html>

2.2. Markets, Exchanges and Quotes

This sub-section pertains only to exchanges and boards of trade in the United States and Canada relative to the agricultural market, in particular to grains. To find quotes, settlement prices for different commodities, for cash, futures, options and stocks, reviews of the days' trading and on-line trading, view the following links.

One of the best sites on the web so far, for market information among and compared to other board of trade or exchanges' web sites, is the Chicago Board of Trade MarketPlex web page. Filled with links to every related important web site on the web, this is probably the best place to start your search for agricultural market information. Through their market information link, they have market data, commentaries, and other reports. You may obtain 10-minute delayed futures quotes to hourly commentaries to weekly grain reports. You can also read "Inside Washington Ag," an agricultural market and policy analysis by World Perspectives full of daily, weekly, and monthly news and in-depth looks at important issues, not to mention their links to other very good on-line news and commentaries sites. Highly recommended, MarketPlex can be found at:

<http://www.cbot.com/mplex.htm>

Another very good site is @griculture On-Line's "Markets" page, with excellent links to market prices for agricultural commodities, futures market, cash prices, to market news and reviews, and reports as well. From a Canadian perspective, simple and compact, you do not have to look far, all is available on one short page. Well done and worth bookmarking, @griculture On-Line USA

is also on the web with an American perspective. Not only are their market pages worth a visit but the whole site is very interesting and well presented. Their URLs are:

Canada

<http://www.agcanada.com/agonline/markets.htm> for market information or
<http://www.agcanada.com/> for the homepage

U.S.

<http://www.agriculture.com/markets/mktindex.html> for market information or
<http://www.agriculture.com/> for the homepage

Other boards of trade and exchanges are a good source of market information. The Kansas City Board of Trade has daily prices for wheat. You might want to visit the Minneapolis Grain Exchange for wheat as well. Their URLs are:

<http://www.kcbt.com/>
<http://www.mgex.com/>

The Chicago Mercantile Exchange has settlement prices on futures and options for cattle, hogs, pork, milk and other commodities including non-agricultural ones such as foreign currencies, interest rates, stock indices, and so on. They also have many links to related sites and to guides on trading as well. Their URL is:

<http://www.cme.com/>

Other interesting and pertinent sites include the Winnipeg Commodity Exchange in Canada at:

<http://www.telenium.ca/WCE/index.html>

You might like to visit two other quite interesting sites such as The Trading Floor or the “World market watch's real-time continuous-stream import-export commodity exchange” as they call themselves. They offer on-line trading, confidential negotiations, customized market and contact research, trade leads and inquiries, industrial and agricultural trade contacts, industrial and agricultural market reports, and so on, an interactive trading facilitator available online for firms involved in international trade. Unfortunately, you must pay to receive any information/reports. But the choices and information are quite impressive and the site is linked regularly. The URL is:

<http://trading.wmw.com/>

Similar to the latter, a second web site of interest would be the Market Center, where you can find discussions/information on futures and options, daily world market reports for forex, stocks, credit and commodities. Their site can be found at:

<http://www.ino.com/>

2.3. Links and Other Sources

This sub-section catalogues the better web sites if you are starting a general search for agricultural and market information on the Internet.

Of all the agricultural sites on the web, the following sites are the most organized, regularly updated, and have the most complete series of links to agricultural related Internet sites. Not only do they cover the world wide web, but electronic mail, journals, discussion groups, data-banks and more. All are excellent and are just as good, compared one to the other.

First, “Agrigator” at the Institute of Agricultural Sciences at the University of Florida. As there are so many links, it would be hard to describe them all here. They are all very good. For market information, the site has one of the best series of links all on one same page. The URL is:

<http://GNV.IFAS.UFL.EDU/www/agator/htm/ag.htm>

and for market information:

<http://WWW.IFAS.UFL.EDU/WWW/AGATOR/HTM/AGMARKET.HTM>

The Agricultural Economics Virtual Library is also an excellent site to start your search. The web site has a very good number of links. Well presented, the URL is:

<http://www.ttu.edu/~aecovl/>

“Not Just Cows” is a guide to Internet resources in agriculture and related sciences. Simple, you can find everything in one table. The guide has been around for some time and is very complete. Recommended, the URL is:

<http://www.snymor.edu/~drewwe/njc/njcmain.htm>

Another good web site for agricultural information sources is the One Globe Marketing web site in Ottawa, Canada. You will find a great number of links to agricultural resources, newsgroups and lists, market news, prices and futures, and much more. Market information is also available for different commodities such as grains, beef, pig and swine, poultry and dairy. Highly recommended, the URL is:

<http://www.oneglobe.com/agriculture/resource.html>

The WOWO Radio 1190 agri-marketing resource list is another great source of Internet links. You can find daily agri-business reports with on-farm information from producers, elevator operators, and legislators in Indiana and Washington, D.C. among many other sources. Along with the market news broadcast schedule, links are found by commodity such as wheat, corn and soybean, pig and swine, and dairy. Their URL is:

<http://www.wowo.com/agrinews.html>

Another web site consists of only one web page organized in a simple fashion with all the links for people interested in market information and in outlook. It covers settlements, market profiles, reports, old farmer's almanac weather and additional weather resources, El Nino, good agricultural resources and policy, organizations, exchanges and much more. Another good place to start your search. The web site was set up by J.F. Harold and the URL is:

<http://www.mcs.com/~jfharold/futures.htm>

To find agricultural information on the Internet can be difficult. An easy-to-use tool is available through the AGRALIN www server, a project of the Wageningen Agricultural University Library in Holland. The guide will help with where to look, what's available, what the differences are between gophers, www, listservs, etc. The most extensive resource guide for agriculture is Wilfred Drew's "Not Just Cows - A Guide to Bitnet/Internet Resources in Agriculture" that was mentioned earlier, but the AGRALIN guide is comparable and easy to use, read and click. The URL is:

<http://www.bib.wau.nl/agralin/finding.html>

The Louisiana State University Library has also set up a well organized web page with links to many other sources of interest such as country reports, market reports and farm bills. This site can be reached at:

<http://www.lib.lsu.edu/bus/agbus.html>

Equally interesting is the "International Agribusiness Marketing and Trade Resource" web page at the Texas Agricultural Extension Service which has a good number of links to market information resources, news, conferences, guides, and so on. The URL is:

<http://www.ipt.com/intlagmktg/>

Canada: For Canada, one should start his/her search at ACEIS, Agriculture and Agri-Food Canada's Electronic Information Service. The site maintains links to any Internet site that

pertains to agriculture information. Well presented, it covers many subjects including some market information. ACEIS can be reached at:

<http://www.agr.ca/newintre.html>

For those more interested in market information, a good site is the Alberta Agriculture, Food and Rural Development Home Page, which features daily, weekly and monthly reports, prices, outlook, reviews and commentaries. Prices, quotes and settlements for wheat from across North America are well presented. Crops, trade, development and many more themes are also presented. They also have a few good links. Their URL is:

<http://www.agric.gov.ab.ca/>

2.4. Email and Discussion Groups

This sub-section groups the mailing lists which offer reception of monthly USDA reports to open discussions of the market.

An electronic mailing list for monthly USDA reports (ERS, NASS and WOAB) is available through the USDA Economics and Statistics System. As a member of the list, you have access to the agricultural and economic estimates that are available in the reports section of this system. Through this service, you will receive the reports of your choice within three hours of their publication via email. Instructions on how to subscribe to this service free of charge and the choices of reports can be found at:

gopher://usda.mannlib.cornell.edu:70/00/reports/REPORTS_EMAIL_DISTRIBUTION

Services offered by the Almanac Mail Servers are USDA market news, articles about the use of computers in agricultural science, Extension Computing Technology Newsletters and more. All instructions can be found at:

<http://www.cs.indiana.edu/internet/almanac.html>

STAT publishing has set up a certain number of agricultural commodity mailing lists containing market information. Groups may include cash crops, futures, grain, etc. Instructions on how to join can be found at:

<http://stat.mlnet.com/stat/maillist.html>

MarketForum is a place for interactive discussions on the markets. Participants discuss subjects such as stocks, options, futures, forex and commodities. To join, you must fill out the form at:

<http://www.ino.com/marketforum/>

The pages set up by Clark Consulting International give a list of agricultural listservs or discussion groups as well as on a second page, a list of electronic magazines. The URL is:

<http://www.agpr.com/consulting/maillist.html>

2.5. Weather, Farm Journals and A Currency and Unit Converter

2.5.1. Weather

For those interested in agriculture outlook, weather can play a major role. Playing such an important role, I have included here a few of the better web sites where one can find up-to-date weather forecasts, precipitation, satellite images, etc.

Two of the better web sites for weather have been set up by Intellicast with MSNBC and the other by Weather.net, maintained by the University of Michigan. These sites present information for cities, counties, and international weather, updated every few hours, from present conditions to four day forecasts around the world. Included are UV indexes, daily precipitation estimates, pressure and hurricane warnings. Beautiful satellite images of all kinds, they even have cameras set up in certain cities and towns where you can see the weather with your own eyes! They also have the best weather links. These sites are worth bookmarking (see explanation in section 0). Their URLs are:

<http://cirrus.sprl.umich.edu/wxnet/>
<http://www.intellicast.com/weather/usa/>

For those who have less time to browse and are simply interested in weather that might affect the markets, a market-moving weather web site with maps of weather and forecasts may provide the desired information. @gricuture On-Line USA has set up such a site with chosen links for quick access easy to use. For outlook purposes, these are well done. The URL is:

<http://www.agriculture.com/markets/mktweath.html>

For those people interested in the mid-western United States, you might want to check out the Midwestern Climate Center situated in Illinois. Well done with simple links. The URL is:

<http://mcc.sws.uiuc.edu/>

The University of Kentucky's web site (the market wire service) has a simple list of choices for weather from local, national or international. You can find weather statistics for each state. Maps and a guide on learning about weather are also available. Of course, Kentucky is covered very well. You can reach their site at:

<gopher://shelley.ca.uky.edu:70/11/weather>

The Mann Library also has a good source of national weather statistics for the United States. Updated weekly, you can reach the site at:

<gopher://usda.mannlib.cornell.edu:70/11/reports/nassr/field/weather/1996>

2.5.2. Journals

For news, reviews, and outlook purposes, farm journals may be of good use. Although the list is far from complete, the following two web sites are very well done. The first is "Farm Journal Today," which presents different themes related to the farm and different commodities. You can find a link to county level weather. Included are discussion groups and some interesting articles covering important issues. The other is "Iowa Farmer Today," which is another well presented site. Its very first link is to the cash grain prices. Other good links include articles, such as early frost warnings are hiking corn prices, weather and other related web sites. Their URLs are:

<http://www.farmjournal.com/> for the Farm Journal
<http://www.fyiowa.com/ift/> for the Iowa Farm Journal

2.5.3. Currency and Unit Converter

Of the many currency converters available on the Internet, a good choice is Olsen and Associates' web site in Switzerland, with daily exchange rates and over 164 currencies, including most African currencies. You can reach their site at:

<http://www.olsen.ch/cgi-bin/exmenu>

At the web site of the Edwards Aquifer Research and Data Center, at Southwest Texas State University in San Marcos, Texas, a unit conversion web page has been set up to convert temperature, time, length, area, volume, mass and much more. Their site can be reached at:

<http://www.eardc.swt.edu/cgi-bin/ucon/ucon.pl>

APPENDIX A

Gopher Menu for gopher://shelley.ca.uky.edu:70/11/agmkts/market_wire

AR ARKANSAS DAILY GRAIN
AR MEMPHIS DAILY GRAIN
CO DENVER CASH GRAIN
DC BARGE GRAIN MOVEMENTS (FRI)
DC GRAINS INSPECTED FOR EXPORT (MON)
IA BARGE TERMINAL GRAIN PRICES IOWA-MINNESOTA
IA INTERIOR IOWA ELEVATOR GRAIN PRICES
IA SIOUX CITY & SOUTHERN MINNESOTA GRAIN PRICES
IL CENTRAL ILLINOIS CORN PROCESSOR REPORT
IL CENTRAL ILLINOIS SOYBEAN PROCESSOR REPORT
IL GRAIN PRICES @ ILLINOIS INTERIOR COUNTRY ELEVATORS
IL GRAIN PRICES ILLINOIS RIVER BARGE POINTS - SOUTH
IL GRAIN TRANSPORTATION (WED)
IL OHIO RIVER BARGE LOADING ELEVATOR GRAIN BIDS
IL TO-ARRIVE TRUCK & RAIL BIDS - GRAIN DELIVERED TO CHICAGO
KS WESTERN KANSAS GRAIN MARKET REPORT
KY OPENING BIDS KENTUCKY GRAIN ELEVATORS
LA DAILY GRAIN LOUISIANA GULF PORTS
MO DAILY NATIONAL GRAIN MARKET REVIEW
MO GULF EXPORT GRAIN PRICES FOB ELEVATOR
MO KANSAS CITY BOARD OF TRADE - GRAIN FUTURES
MO KANSAS CITY GRAIN PRICES SPOT FOB RAIL
MO KANSAS CITY TRUCK GRAIN BIDS
MO MISSOURI GRAIN
MO WEEKLY NATIONAL GRAIN MARKET REVIEW (FRI)
MT MONTANA CASH GRAIN PRICES
MT MONTANA CASH GRAIN WEEKLY (FRI)
NC NORTH CAROLINA GRAIN
NE NEBRASKA GRAIN ELEVATOR BIDS
NE OMAHA-COUNCIL BLUFFS GRAIN PRICES
NM EASTERN NEW MEXICO GRAIN REPORT (TUE)
OH TOLEDO ELEVATOR/PROCESSOR GRAIN BIDS
OK OKLAHOMA GRAIN REPORT
OR BIDS FOR GRAIN DELIVERED TO PORTLAND
OR EXPORT GRAIN BIDS
OR PORTLAND WEEKLY GRAIN REVIEW - PART 1 (THU)
OR PORTLAND WEEKLY GRAIN REVIEW - PART 2 (THU)
SC SOUTH CAROLINA CLOSING GRAIN BIDS
SC SOUTH CAROLINA GRAIN WEEKLY REVIEW (FRI)
SD EAST RIVER SOUTH DAKOTA GRAIN MARKET
TX TEXAS HI PLAINS DAILY GRAIN & HOUSTON CASH GRAIN
UT UTAH DAILY GRAIN REPORT
VA PRELIMINARY VIRGINIA GRAIN
VA VIRGINIA GRAIN
WI MILWAUKEE TERMINAL GRAIN PRICES TRUCK DELIVERED
WI WISCONSIN COUNTRY ELEVATOR GRAIN BIDS

APPENDIX B

Agricultural Market Information Virtual Library **Latest Internet Sites** (May 1997)

These and other Internet sites have been added since the first publication of the IDWP paper. New Internet sites are made available and created everyday on the World Wide Web. We update the Agricultural Market Information Virtual Library regularly. We invite you to visit the site frequently to refresh your bookmark to this site. Over 100 new sites have been found!

<http://www.aec.msu.edu/agecon/fs2/market/contents.htm>

You have questions, comments, suggestions or you would like to add a site,
please write to **levallee@pilot.msu.edu**

Commodities - Nuts, Dried Fruits, Seeds, Pulses and Grains. The Agricultural Commodities Exchange site is for use by all players in various sub-sectors: growers, producers, traders, brokers, manufacturers and retailers who buy, sell and trade in agricultural commodities. This web site is one of the very few sites which has information on NUTS, cashews, walnuts, hazel nuts, pistachios and much more! You can advertise your company, and bid or offer for a growing range of commodities. There are reports on factors affecting prices and production. Weather reports and price and production graphs are also being developed.

<http://www.alara.co.uk/main.htm>

The SADC Food Security Programme - SADC Food Security and Technical Administrative Unit (FSTAU) in Harare, Zimbabwe. At this Internet site, you will find food security quarterly bulletins, food security updates, agro-meteorological updates, monthly bulletins on the status of the growing season, local seeds system news, satellite images, database on food and agriculture in SADC and much more. You can access specific information for each of the SADC countries, based on the SADC FSTAU and FAO-GIEWS databases. You can also click on a map for individual country information. Other sections available from the web site are: SADC Regional Early Warning System, Famine Early Warning System, Remote Sensing Project, Food Security Training Program, Small Scale Seed Production Project, Food Security Database Project, SADC EIS/GIS Technical Unit, Regional Food and Nutritional Information System, and the SADC Center of Communication for Development. The URL is:

<http://www.zimbabwe.net/sadc-fanr/intro.htm>

Commodity - Rice. The *Singapore Business Times* offers a great variety of market information on commodities. Not only can we get daily FOB Thai rice prices (covering several white, broken,

loonzain and parboiled rice) but prices for many more agricultural commodities varying from palm, kernel and coconut oil, to coffee, cocoa, sugar, copra, nutmeg and rubber from Liffe, Rotterdam, to CBOT and Singapore of course. Non-agricultural commodities such as crude oil and metals can also be found. BT commodities also puts out an excellent Weekly Commodity Summary (updated every Monday).

<http://biztimes.asia1.com/btcommo/>

The *Bangkok Post* has published a year-end '96 economic review and outlook report on the country's agriculture situation. Good reports have been written for rice, maize, tapioca, rubber, poultry and the fisheries. Some price data is given from 1994 to September 1996 and yearly production statistics back to 1992 are also available.

http://www.bangkokpost.net/y_end_eco_rev/yr96agri.html

A *Rice yearbook* is available from the Mann Library for 1995. It includes U.S. rice production, supply, disappearance, trade, and price data. It also includes state acreage, yield, and production data; U.S. and world price series; and price support program statistics. For market information and prices, download these tables from their site:

Table19.WK1 World market rice prices, loan rate basis, 86-95

Table20.WK1 Rough rice: Average price received by farmers by month and marketing year, 82/83-95/96

Table21.WK1 Milled rice: Average price, FOB mills, at selected milling centers, 76/77-95/96

Table22.WK1 Rice byproducts: Monthly average price, SW Louisiana, 75/76-95/96

Table24.WK1 Thailand milled rice prices, FOB Bangkok, 81/82-95/96

<http://www.mannlib.cornell.edu/data-sets/crops/89001/1/>

The *FAO* regularly publishes data on rice export prices and has an export price index with sub-indices on long, medium/short grain rice as well as sub-indices on high and low quality rice. The index was constructed in the 1980s and has regularly been revised and weighted, to reflect the huge changes that have occurred in the rice export market. They are published in rice market reports on a monthly basis. See the Rice Situation Update. You may also find data on rice in the Commodity Market Review 1995-1996, see rice.

<http://www.fao.org/waicent/faoinfo/economic/ESC/ESCP/rice.htm>

<http://www.fao.org/waicent/faoinfo/economic/esc/escp/cmr/cmr00003.htm#I2>

Fruits and Vegetables. This is the place to be when looking for market information for fruits and vegetable. They have been mentioned once already in this site, but since have included new features and have upgraded their site. Make sure to obtain a free password registration. The site has daily price information on more than 120 fruit and vegetable commodities from all the

wholesale markets of USA, Canada, Mexico and Europe. Today's Market Prices now includes a weekly report from the Rotterdam Fruit and Vegetables Exchange Auction Market, that reflects the movement of the most important point of entry of Europe; a bi-weekly report from Japan (the fruits and vegetable prices of the Tokyo Central Wholesale Ota Market); and daily Shipping Points prices of the USA, which makes them somewhat unique in their category. The URL is:

<http://www.todaymarket.com>

Happy surfing!

MSU International Development Papers

How to order from the MSU Bulletin Office:

All domestic orders under \$100 must be prepaid either by check or credit card. Make checks payable to MICHIGAN STATE UNIVERSITY. Charges against credit cards (VISA and MasterCard) must be accompanied by the card's full number and expiration date and the cardholder's signature and daytime business/home phone number. Orders totaling \$100 or more can be billed by MSU. Institutions and firms should use their official purchase order.

All foreign orders must be prepaid only in U.S. dollars by American Express Money Order, International Money Order, U.S.A. Postal Money Order, U.S. Dollar World Money Order, or check, which must be drawn on a United States bank.

For foreign orders, include an additional 20 percent for surface postage. For air mail orders, please call for the appropriate amount due.

Please do not send cash. Payment must be included with orders. All sales are final. When ordering from the Bulletin Office by mail, you will need each item's complete identification number and price. Be sure to print your complete address, including ZIP code.

Fill out and send the order form provided to:

MSU Bulletin Office
10-B Agriculture Hall
Michigan State University
East Lansing, MI 48824-1039
Fax: (517)353-7168
Tel: (517)355-0240
E-mail: distbulk@msue.msu.edu

Selected copies are available free of charge to individuals in developing countries, although supplies of these are limited. If free copies are no longer available, MSU will send you order information. USAID officials may obtain free copies through A.I.D.'s Development Information System (CDIE) or single copies are available free of charge by writing to the above address at Michigan State University.

Available from the MSU Bulletin Office

MSU INTERNATIONAL DEVELOPMENT PAPERS

- IDP 13 *Sources and Effects of Instability in the World Rice Market* by T. S. Jayne. 1993. 104 pp. \$11.00 (CDIE reference **PN-ABJ-359**)
- IDP 14 *The Impact of Agricultural Technology in Sub-Saharan Africa: A Synthesis of Symposium Findings* by James F. Oehmke and Eric C. Crawford. 1993. 33 pp. \$7.00 (CDIE reference **PN-ABP-321**)
- IDP 14F *L'Impact de la technologie agricole en Afrique subsaharienne: Synthese des conclusions du colloque* par James F. Oehmke and Eric W. Crawford. 1993. 34 pp. \$7.00 (CDIE reference **PN-ABQ-056**)
- IDP 15 *Market-Oriented Strategies to Improve Household Access to Food: Experience from Sub-Saharan Africa* by T.S. Jayne, D.L. Tschirley, John M. Staatz, James D. Shaffer, Michael T. Weber, Munhamo Chisvo, and Mulinge Mukumbu.* 1994. 61 pp. \$9.00 (CDIE reference **PN-ABS-755**)
- IDP 16 *Improving the Measurement and Analysis of African Agricultural Productivity: Promoting Complementarities between Micro and Macro Data* by Valerie Kelly, Jane Hopkins, Thomas Reardon, and Eric Crawford. 1995. 44 pp. \$7.00 (CDIE reference **pending**)
- IDP 17 *Promoting Food Security in Rwanda Through Sustainable Agricultural Productivity: Meeting the Challenges of Population Pressure, Land Degradation, and Poverty* by Daniel C. Clay, Fidele Byiringiro, Jaakko Kangasniemi, Thomas Reardon, Bosco Sibomana, Laurence Uwamariya, and David Tardif-Douglin. 1995. 115 pp. \$11.00 (CDIE reference **PN-ABX-501**)
- IDP 18 *Promoting Farm Investment for Sustainable Intensification of African Agriculture* by Thomas Reardon, Eric Crawford, and Valerie Kelly. 1995. 37 pp. \$7.00 (CDIE reference **PN-ABX-753**)

- IDP 19 *Effects of Market Reform on Access to Food by Low-Income Households: Evidence from Four Countries in Eastern and Southern Africa* by T.S. Jayne, L. Rubey, D. Tschirley, M. Mukumbu, M. Chisvo, A. Santos, M. Weber, and P. Diskin. 1995. 83 pp. \$9.00. (CDIE reference **PN-ABX-754**)
- IDP 20 *Cash Crop and Foodgrain Productivity in Senegal: Historical View, New Survey Evidence, and Policy Implications* by Valerie Kelly, Bocar Diagana, Thomas Reardon, Matar Gaye, and Eric Crawford. 1996. 140 pp. \$13.00 (CDIE reference **PN-ABY-173**)
- IDP 22 *Determinants of Farm Productivity in Africa: A Synthesis of Four Case Studies* by Thomas Reardon, Valerie Kelly, Eric Crawford, Thomas Jayne, Kimseyinga Savadogo, and Daniel Clay. 1996. 50 pp. \$7.00 (CDIE reference **pending**)

WORKING PAPERS

- IDWP 39/1 *The Impact of Investments in Maize Research and Dissemination in Zambia. Part I: Main Report.* Julie Howard with George Chitalu and Sylvester Kalonge. 1993. 112 pp. \$11.00 (CDIE reference **PN-ABS-724**)
- IDWP 39/2 *The Impact of Investments in maize Research and Dissemination in Zambia. Part II: Annexes.* Julie Howard with George Chitalu and Sylvester Kalonge. 1993. 81 pp. \$9.00 (CDIE reference **PN-ABS-727**)
- IDWP 40 *An Economic Analysis of Research and Technology Transfer of Millet, Sorghum, and Cowpeas in Niger* by Valentina Mazzucato and Samba Ly. 1994. 104 pp. \$11.00. (CDIE reference **PN-ABT-283 or PN-ABS-728**)
- IDWP 41 *Agricultural Research Impact Assessment: The Case of Maize Technology Adoption in Southern Mali* by Duncan Boughton and Bruno Henry de Frahan. 1994. 95 pp. \$11.00 (CDIE reference **PN-ABS-729**)
- IDWP 42 *The Rate of Return to Agricultural Research in Uganda: The Case of Oilseeds and Maize* by Rita Laker-Ojok. 1994. 56 pp. \$7.00 (CDIE reference **PN-ABS-730**)

- IDWP 43 *Assessing the Impact of Cowpea and Sorghum Research and Extension in Northern Cameroon* by James A. Sterns and Richard H. Bernsten. 1994. 48 pp. \$7.00 **(CDIE reference PN-ABS-731)**
- IDWP 44 *Food Security II Cooperative Agreement: Project Fact Sheets (1994 Version)* by MSU Food Security II Research Team. 1994. 104 pp. \$11.00 **(CDIE reference PN-ABW-277)**
- IDWP 45 *The Potential Returns to Oilseeds Research in Uganda: The Case of Groundnuts and Sesame* by Rita Laker-Ojok. 1994. 50 pp. \$7.00 **(CDIE reference pending)**
- IDWP 46 *Understanding Linkages among Food Availability, Access, Consumption, and Nutrition in Africa: Empirical Findings and Issues from the Literature* by Patrick Diskin.* 1994. 47 pp. \$7.00 **(CDIE reference PN-ABS-732)**
- IDWP 47 *Targeting Assistance to the Poor and Food Insecure: A Review of the Literature* by Mattias Lundberg and Patrick Diskin.* 1994. 56 pp. \$7.00 **(CDIE reference PN-ABS-733)**
- IDWP 48 *Interactions Between Food Market Reform and Regional Trade in Zimbabwe and South Africa: Implications for Food Security* by T.S. Jayne, T. Takavarasha, and Johan van Zyl. 1994. 39 pp. \$7.00 **(CDIE reference pending)**
- IDWP 49 *A Strategic Approach to Agricultural Research Program Planning in Sub-Saharan Africa*, by Duncan Boughton, Eric Crawford, Julie Howard, James Oehmke, James Shaffer, and John Staatz. 1995. 59 pp. \$9.00 **(CDIE reference PN-ABU-948)**
- IDWP 49F *Une approche stratégique pour la planification du programme de recherche agricole en Afrique subsaharienne*, by Duncan Boughton, Eric Crawford, Julie Howard, James Oehmke, James Shaffer et John Staatz. 1997. 67 pp. \$9.00 **(CDIE reference PN-ACA-071)**
- IDWP 50 *An Analysis of Alternative Maize Marketing Policies in South Africa*, by T.S. Jayne, Milan Hajek and Johan van Zyl. 1995. 51 pp. \$7.00 **(CDIE reference PN-ABW-091)**
- IDWP 51 *Confronting the Silent Challenge of Hunger: A Conference Synthesis*, by T.S. Jayne, David Tschirley, Lawrence Rubey, Thomas Reardon, John M. Staatz, and Michael Weber. 1995. 37 pp. \$7.00 **(CDIE reference PN-ABW-276)**
- IDWP 52 *An Ex-Ante Evaluation of Farming Systems Research in Northeastern Mali: Implications for Research and Extension Policy*, by Bruno Henry de Frahan. 1995. 82 pp. \$9.00 **(CDIE reference pending)**
- IDWP 53 *Who Eats Yellow Maize? Preliminary Results of a Survey of Consumer Maize Preferences in Maputo, Mozambique*, by David L. Tschirley and Ana Paula Santos. 1995. 16 pp. \$7.00 **(CDIE reference PN-ABX-988)**
- IDWP 54 *Food Security II Cooperative Agreement: Project Fact Sheets (1995/96 Version)*, compiled by MSU Food Security II Research Team. 1996. 151 pp. \$13.00. **(CDIE reference PN-ABY-072)**
- IDWP 55 *Trends in Real Food Prices in Six Sub-Saharan African Countries*, by T.S. Jayne, et al. 1996. 70 pp. \$9.00 **(CDIE reference PN-ABY-172)**
- IDWP 56 *Food Marketing and Pricing Policy in Eastern and Southern Africa: Lessons for Increasing Agricultural Productivity and Access to Food*, by T.S. Jayne and Stephen Jones. 1996. 40 pp. \$7.00 **(CDIE reference PN-ABY-547)**
- IDWP 57 *An Economic and Institutional Analysis of Maize Research in Kenya*, by Daniel David Karanja. 1996. 24 pp. \$7.00 **(CDIE reference PN-ABY-548)**
- IDWP 58 *Fighting an Uphill Battle: Population Pressure and Declining Land Productivity in Rwanda* by Daniel C. Clay. 1996. 28 pp. \$7.00 **(CDIE reference PN-ABM-627)**
- IDWP 59 *Finding the Balance Between Agricultural and Trade Policy: Rwanda Coffee Policy in Flux* by David Tardif-Douglin, Jean-Léonard Ngirumwami, Jim Shaffer, Anastase Murekezi, and Théobald Kampayana. 1996. 14 pp. \$7.00 **(CDIE reference PN-ABY-802)**
- IDWP 60 *Agriculture R&D and Economic Growth* by Elias Dinopoulos. 1996. 25 pp. \$7.00 **(CDIE reference pending)**
- IDWP 61 *Zambia's Stop-And-Go Revolution: The Impact of Policies and Organizations on the Development and Spread of Maize Technology* by Julie A. Howard and Catherine Mungoma. 1996. 39 pp. \$7.00 **(CDIE reference PN-ABY-803)**
- IDWP 62 *Intrahousehold Allocations: A Review of Theories, Empirical Evidence and Policy Issues* by John Strauss and Kathleen Beegle. 1996. 60 pp. \$9.00 **(CDIE reference PN-ABY-848)**
- IDWP 63 *Transforming Poultry Production and Marketing in Developing Countries: Lessons Learned with Implications for Sub-Saharan Africa* by Laura L. Farrelly. 1996. 46 pp. \$7.00 **(CDIE reference PN-ABY-849)**
- IDWP 64 *Market Information Sources Available Through the Internet: Daily to Yearly Market and Outlook Reports, Prices, Commodities and Quotes* by Jean-Charles Le Vallée. 1996. 21 pp. \$7.00 **(CDIE reference pending)**
- IDWP 65 *Food Security II Cooperative Agreement: Project Fact Sheets (1996 Version)* by MSU Food Security II Research Team. 1997. 190 pp. \$15.00 **(CDIE reference pending)**
- * Also published by A.I.D./Washington

Mail your marked form
(via mail or fax) to:

MSU Bulletin Office

10-B Agriculture Hall

Michigan State University

East Lansing, MI 48824-1039

Fax: (517) 353-7168

Phone: (517) 355-0240

E-mail:

distbulk@msue.msu.edu

ORDER FORM for Papers Available from MSU

Required with all charge card orders:

Check one: _____ VISA _____ MasterCard

Card number: _____

Signature: _____

Expiration Date: _____ Daytime Phone Number: () _____

SHIP TO:

Name: _____

Address: _____

Domestic orders totaling \$100 or more can be billed by MSU. Institutions and firms should use their official purchase order. All other orders, including foreign orders, must be pre-paid.

Mark each choice with the quantity needed and enter total charges.

_____ IDP 13 \$11.00	_____ IDWP 41 \$11.00	_____ IDWP 53 \$7.00
_____ IDP 14 \$7.00	_____ IDWP 42 \$7.00	_____ IDWP 54 \$13.00
_____ IDP 14F \$7.00	_____ IDWP 43 \$7.00	_____ IDWP 55 \$9.00
_____ IDP 15 \$9.00	_____ IDWP 44 \$11.00	_____ IDWP 56 \$7.00
_____ IDP 16 \$7.00	_____ IDWP 45 \$7.00	_____ IDWP 57 \$7.00
_____ IDP 17 \$11.00	_____ IDWP 46 \$7.00	_____ IDWP 58 \$7.00
_____ IDP 18 \$7.00	_____ IDWP 47 \$7.00	_____ IDWP 59 \$7.00
_____ IDP 19 \$9.00	_____ IDWP 48 \$7.00	_____ IDWP 60 \$7.00
_____ IDP 20 \$13.00	_____ IDWP 49 \$9.00	_____ IDWP 61 \$7.00
_____ IDP 22 \$7.00	_____ IDWP 49F \$9.00	_____ IDWP 62 \$9.00
_____ IDWP 39/1 \$11.00	_____ IDWP 50 \$7.00	_____ IDWP 63 \$7.00
_____ IDWP 39/2 \$9.00	_____ IDWP 51 \$7.00	_____ IDWP 64 \$7.00
_____ IDWP 40 \$11.00	_____ IDWP 52 \$9.00	_____ IDWP 65 \$15.00

Sub-Total	\$ _____
20% (foreign orders, surface mail)	\$ _____
International Airmail postage	\$ _____
(call or e-mail for rates)	
Total Amount	\$ _____

The MSU International Development Papers published before 1993 (IDP numbers 1-11, IDWP numbers 1-38, and RP numbers 1-31) may be obtained through A.I.D.'s Development Information System (CDIE) and are not available from the MSU Bulletin Office.

How to Order MSU International Development Papers from USAID:

The MSU International Development Papers published before 1993 (IDP numbers 1-11, IDWP numbers 1-38, and RP numbers 1-31) may be obtained **only** through A.I.D.'s Development Information System (CDIE).

The CDIE reference numbers are shown on the following list. They are also available in A.I.D.'s Development Information System CD-ROM Database (CD-DIS), which is available to USAID missions and to USAID/W offices free of charge and to the public for an annual subscription fee.

USAID's Internet Gopher address:
GOPHER.INFO.USAID.GOV. Citations (including abstracts) to USAID documents can be found under the Gopher main menu item "Reports and Publications." Document identification necessary to order the full document in paper or microfiche form from the Development Information Services Clearinghouse (DISC) is included with the citations.

If you would like to order any of the pre-1993 IDP's, IDWP's or RP's, please do not request them from MSU, but send your request--with the correct CDIE reference number--directly to the DISC:

Mail: Development Information Services
Clearinghouse

1500 Wilson Blvd., Suite 1010

Arlington, VA 22209-2404

Telephone: 703-351-4006

Fax: 703-351-4039

Telex: 703-351-4038

Internet e-mail address: AIDDISC@CAPCON.NET

If you cannot provide the CDIE reference number for the publication you wish to order, contact the A.I.D. Development Information Center Reference Librarian, who will supply you with the complete order information:

Telephone: 703-875-4818
Fax: 703-875-5269

Prices

Documents are provided to AID employees without charge. Others are required to pay reproduction and mailing/handling costs. Current prices may be obtained by contacting the Document Distribution Unit. A limited number of microfiche copies are provided without charge to LDC institutions.

Exchange programs

CDIE has established reciprocal agreements with selected development organizations who provide documents or other information resources to CDIE in exchange for distribution of CDIE documents or information. The materials received as a result of these exchange agreements are located in CDIE.

Deposit accounts

Deposit accounts may be established by USAID contractors and other users to facilitate the payment for documents ordered.

Available in A.I.D.'s Development Information System (CDIE)

MSU INTERNATIONAL DEVELOPMENT PAPERS

- IDP 1 *Research on Agricultural Development in Sub-Saharan Africa: A Critical Survey* by Carl K. Eicher and Doyle C. Baker. 1982. 346 pp. **(CDIE reference PN-AAL-692)**
- IDP 1F *Etude Critique de la Recherche sur la Developpement Agricole en Afrique Subsaharienne* par Carl K. Eicher et Doyle C. Baker. 1982. 345 pp. **(CDIE reference PN-ABA-840)**
- IDP 2 *A Simulation Study of Constraints on Traditional Farming Systems in Northern Nigeria* by Eric W. Crawford. 1982. 136 pp. **(CDIE reference PN-AAP-677)**
- IDP 3 *Farming Systems Research in Eastern Africa: The Experience of CIMMYT and Some National Agricultural Research Services, 1976-81* by M.P. Collinson. 1982. 67 pp. **(CDIE reference PN-AAM-826)**
- IDP 4 *Animal Traction in Eastern Upper Volta: A Technical, Economic and Institutional Analysis* by Vincent Barrett, Gregory Lassiter, David Wilcock, Doyle Baker, and Eric Crawford. 1982. 132 pp. **(CDIE reference PN-AAM-262)**
- IDP 5 *Socio-Economic Determinants of Food Consumption and Production in Rural Sierra Leone: Application of an Agricultural Household Model with Several Commodities* by John Strauss. 1983. 91 pp. **(CDIE reference PN-AAM-031)**
- IDP 6 *Applications of Decision Theory and the Measurement of Attitudes Towards Risk in Farm Management Research in Industrialized and Third World Settings* by Beverly Fleisher and Lindon J. Robison. 1985. 105 pp. **(CDIE reference PN-AAU-740)**
- IDP 7 *Private Decisions and Public Policy: The Price Dilemma in Food Systems in Developing Countries* by Peter Timmer. 1986. 58 pp. **(CDIE reference PN-AAZ-091)**
- IDP 8 *Rice Marketing in Senegal River Valley: Research Findings and Policy Reform Options* by Michael L. Morris. 1987. 89 pp. **(CDIE reference PN-AAZ-092)**
- IDP 9 *Small Scale Industries in Developing Countries: Empirical Evidence and Policy Implications* by Carl Liedholm and Donald Mead. 1987. 141 pp. **(CDIE reference PN-AAX-734)**
- IDP 10 *Maintaining the Momentum in Post-Green Revolution Agriculture: A Micro-Level Perspective from Asia* by Derek Byerlee. 1987. 57 pp. **(CDIE reference PN-AAZ-093)**
- IDP 11 *The Economics of Smallholder Maize Production in Zimbabwe: Implications for Food Security* by David D. Rohrbach. 1989. 100 pp. **(CDIE reference PN-ABD-549)**

WORKING PAPERS

- IDWP 1 *Farming Systems Research (FSR) in Honduras, 1977-81: A Case Study* by Daniel Galt, Alvaro Diaz, Mario Contreras, Frank Peairs, Joshua Posner, and Franklin Rosales. 1982. 48 pp. **(CDIE reference PN-AAM-827)**
- IDWP 2 *Credit Agricole et Credit Informal dans la Region Orientale de Haute-Volta: Analyse Economique, Performance Institutionnelle et Implications en Matiere de Politique de Developpement Agricole* by Edouard K. Tapsoba. 1982. 125 pp. **(CDIE reference PN-AAZ-527)**
- IDWP 3 *Employment and Construction: Multicountry Estimates of Costs and Substitutions Elasticities for Small Dwellings* by W.P. Strassmann. 1982. 42 pp. **(CDIE reference PN-AAM-455)**
- IDWP 4 *Sub-Contracting in Rural Areas of Thailand* by Donald C. Mead. 1982. 53 pp. **(CDIE reference PN-AAN-192)**

- IDWP 5 *Microcomputers and Programmable Calculators for Agricultural Research in Developing Countries* by Michael T. Weber, James Pease, Warren Vincent, Eric W. Crawford, and Thomas Stilwell. 1983. 113 pp. **(CDIE reference PN-AAN-441)**
- IDWP 6 *Periodicals for Microcomputers: An Annotated Bibliography* by Thomas Stilwell. 1983. 70 pp. **(CDIE reference PN-AAN-443)**
- IDWP 7 *Employment and Housing in Lima, Peru* by Paul Strassmann. 1983. 96 pp. **(CDIE reference PN-AAN-396)**
- IDWP 8 *Faire Face a la Crise Alimentaire de l'Afrique* by Carl K. Eicher. 1983. 29 pp. **(CDIE reference PN-AAN-444)**
- IDWP 9 *Software Directories for Microcomputers: An Annotated Bibliography* by Thomas C. Stilwell. 1983. 14 pp. **(CDIE reference PN-AAN-442)**
- IDWP 10 *Instructional Aids for Teaching How to Use the TI-59 Programmable Calculator* by Ralph E. Hepp. 1983. 133 pp. **(CDIE reference PN-AAP-133)**
- IDWP 11 *Programmable Calculator (TI-59) Programs for Marketing and Price Analysis in Third World Countries* by Michael L. Morris and Michael T. Weber. 1983. 105 pp. **(CDIE reference PN-AAP-134)**
- IDWP 12 *An Annotated Directory of Statistical and Related Microcomputer Software for Socioeconomic Data Analysis* by Valerie Kelly, Robert D. Stevens, Thomas Stilwell, and Michael T. Weber. 1983. 165 pp. **(CDIE reference PN-AAP-135)**
- IDWP 13 *Guidelines for Selection of Microcomputer Hardware* by Chris Wolf. 1983. 90 pp. **(CDIE reference PN-AAR-106)**
- IDWP 14 *User's Guide to BENCOS A SuperCalc Template for Benefit-Cost Analysis* by Eric W. Crawford, Ting-Ing Ho and A. Allan Schmid. 1984. 35 pp. **(CDIE reference PN-AAQ-682)**
- IDWP 15 *An Evaluation of Selected Microcomputer Statistical Programs* by James W. Pease and Raoul Lepage with Valerie Kelly, Rita Laker-Ojok, Brian Thelen, and Paul Wolberg. 1984. 187 pp. **(CDIE reference PN-AAQ-683)**
- IDWP 16 *Small Enterprises in Egypt: A study of Two Governorates* by Stephen Davies, James Seale, Donald C. Mead, Mahmoud Badr, Nadia El Sheikh and Abdel Rahman Saidi. 1984. 187 pp. **(CDIE reference PN-AAU-610)**
- IDWP 17 *Microcomputer Statistical Packages for Agricultural Research* by Thomas C. Stilwell. 1984. 23 pp. **(CDIE reference PN-AAZ-516)**
- IDWP 18 *An Annotated Directory of Citation Database, Educational, System Diagnostics and Other Miscellaneous Microcomputer Software of Potential Use to Agricultural Scientists in Developing Countries* by Thomas C. Stilwell and P. Jordan Smith. 1984. 34 pp. **(CDIE reference PN-AAZ-523)**
- IDWP 19 *Irrigation in Southern Africa: An Annotated Bibliography* by Amalia Rinaldi. 1985. 60 pp. **(CDIE reference PN-AAZ-524)**
- IDWP 20 *A Microcomputer Based Planning and Budgeting System for Agricultural Research Programs* by Daniel C. Goodman, Jr., Thomas C. Stilwell and P. Jordan Smith. 1985. 75 pp. **(CDIE reference PN-AAZ-525)**
- IDWP 21 *Periodicals for Microcomputers: An Annotated Bibliography, Second Edition* by Thomas C. Stilwell. 1985. 89 pp. **(CDIE reference PN-AAZ-526)**
- IDWP 22 *Software Directories for Microcomputers: An Annotated Bibliography, Second Edition* by Thomas C. Stilwell. 1985. 21 pp. **(CDIE reference PN-AAZ-528)**
- IDWP 23 *A diagnostic Perspective Assessment of the Production and Marketing System for Mangoes in the Eastern Caribbean* by Alan Hrapsky with Michael Weber and Harold Riley. 1985. 106 pp. **(CDIE reference PN-AAZ-529)**
-

- IDWP 24 *Subcontracting Systems and Assistance Programs: Opportunities for Intervention* by Donald C. Mead. 1985. 32 pp. **(CDIE reference PN-AAZ-943)**
- IDWP 25 *Small Scale Enterprise Credit Schemes: Administrative Costs and the Role of Inventory Norms* by Carl Liedholm. 1985. 23 pp. **(CDIE reference PN-AAU-615)**
- IDWP 26 *Subsector Analysis: Its Nature, Conduct and Potential Contribution to Small Enterprise Development* by James J. Boomgard, Stephen P. Davies, Steve Haggblade and Donald Mead. 1986. 57 pp. **(CDIE reference PN-AAZ-101)**
- IDWP 27 *The Effect of Policy and Policy Reforms on Non-Agricultural Enterprises and Employment in Developing Countries: A Review of Past Experiences* by Steve Haggblade, Carl Liedholm, and Donald C. Mead. 1986. 133 pp. **(CDIE reference PN-AAV-001)**
- IDWP 28 *Rural Small Scale Enterprises in Zambia: Results of a 1985 Country-Wide Survey* by John T. Milimo and Yacob Fisseha. 1986. 76 pp. **(CDIE reference PN-AAZ-102)**
- IDWP 29 *Fundamentals of Price Analysis in Developing Countries' Food Systems: A Training Manual to Accompany the Microcomputer Software Program 'MSTAT'* by Stephen Goetz and Michael T. Weber. 1986. 148 pp. **(CDIE reference PN-AAZ-103)**
- IDWP 30 *Rapid Reconnaissance Guidelines for Agricultural Marketing and Food System Research in Developing Countries* by John S. Holtzman. 1986. 75 pp. **(CDIE reference PN-AAZ-104)**
- IDWP 31 *Contract Farming and Its Effect on Small Farmers in Less Developed Countries* by Nicholas William Minot. 1986. 86 pp. **(CDIE reference PN-AAZ-105)**
- IDWP 32 *Food Security Policy and the Competitiveness of Agriculture in the Sahel: A Summary of the "Beyond Mindelo" Seminar* by Thomas S. Jayne and Nicholas Minot. 1989. 27 pp. **(CDIE reference PN-ABF-570)**
- IDWP 33 *Small Scale Manufacturing Growth in Africa: Initial Evidence* by Carl Liedholm and Joan Parket. 1989. 18 pp. **(CDIE reference PN-ABB-945)**
- IDWP 34 *Food Security and Economic Growth in the Sahel: A Summary of the September 1989 Cereals Workshop* by Victoire C. D'Agostino and John M. Staatz. 1989. 44 pp. **(CDIE reference PN-ABD-956)**
- IDWP 35 *User's Manual for the SADCC Cereals Trade Database Compiled by the University of Zimbabwe and Michigan State University* by David Kingsbury. 1989. 44 pp. **(CDIE reference PN-ABF-378)**
- IDWP 36 *Managing Food Security Action Programs in Botswana* by Sisay Asefa. 1989. 36 pp. **(CDIE reference PN-ABF-377)**
- IDWP 37 *User's Guide to BENCOS Lotus 1-2-3 Templates for Benefit-Cost Analysis* by Eric Crawford and A. Allan Schmid. 1990. 23 pp. **(CDIE reference PN-ABF-530)**
- IDWP 38 *Research Methods in the MSU Food Security in Africa Project: Conceptualizing and Implementing Policy Relevant Studies* by James F. Tefft with Michael T. Weber and John M. Staatz. 1990. 128 pp. **(CDIE reference pending)**
- RP 5 *The Food Security Equation in Southern Africa* by Mandivamba Rukuni and Carl K. Eicher. 1987. 32 pp. **(CDIE reference PN-AAZ-121)**
- RP 6 *Economic Analysis of Agronomic Trials for the Formulation of Farmer Recommendations* by Eric Crawford and Mulumba Kamuanga. 1988. 41 pp. **(CDIE reference PN-AAZ-370)**
- RP 6F *L'Analyse Economiques des Essais Agronomiques pour la Formulation des Recommandations aux Paysans* par Eric Crawford et Mulumba Kamuanga. 1987. 33 pp. **(CDIE reference PN-AAZ-122)**
- RP 7 *Economic Analysis of Livestock Trials* by Eric Crawford. 1987. 36 pp. **(CDIE reference PN-AAZ-371)**
- RP 7F *L'Analyse Economique des Essais Zootechniques* par Eric Crawford. 1987. 36 pp. **(CDIE reference PN-AAZ-123)**
- RP 8 *A Field Study of Fertilizer Distribution and Use in Senegal, 1984: Summary Report* by Eric Crawford and Valerie Kelly. 1987. 32 pp. **(CDIE reference PN-AAZ-124)**
- RP 8F *Enquete sur la Distribution et l'Utilisation de l'Engrais au Sénégal, 1984: Résumé Analytique* par Eric Crawford et Valerie Kelly. 1988. 43 pp. **(CDIE reference PN-ABC-173)**
- RP 9 *Improving Food Marketing Systems in Developing Countries: Experiences from Latin America* by Kelly Harrison, Donald Henley, Harold Riley and James Shaffer. 1987. 135 pp. **(CDIE reference PN-AAZ-125)**
- RP 10 *Policy Relevant Research on the Food and Agricultural System in Senegal* by Mark Newman, Eric Crawford and Jacques Faye. 1987. 30 pp. **(CDIE reference PN-AAZ-126)**
- RP 10F *Orientations et Programmes de Recherche Macro-Economiques sur le Systeme Agro-Alimentaire Sénégalais* par Mark Newman, Eric Crawford et Jacques Faye. 1987. 37 pp. **(CDIE reference PN-AAZ-127)**
- RP 11 *A Field Study of Fertilizer Distribution and Use in Senegal, 1984: Final Report* by Eric Crawford, Curtis Jolly, Valerie Kelly, Philippe Lambrecht, Makhona Mbaye, and Matar Gaye. 1987. 106 pp. **(CDIE reference PN-AAZ-128)**
- RP 11F *Enquête sur la Distribution et l'Utilisation de l'Engrais au Sénégal, 1984: Rapport Final* par Eric Crawford, Curtis Jolly, Valerie Kelly, Philippe Lambrecht, Makhona Mbaye, et Matar Gaye. 1987. 106 pp. **(CDIE reference pending)**
- RP 12 *Private and Public Sectors in Developing Country Grain Markets: Organization Issues and Options in Senegal* by Mark D. Newman, P. Alassane Sow, and Ousseynou NDoye. 1987. 14 pp. **(CDIE reference PN-AAZ-129)**
- RP 13 *Agricultural Research and Extension in Francophone West Africa: The Senegal Experience* by R. James Bingen and Jacques Faye. 1987. 23 pp. **(CDIE reference PN-AAV-929)**
- RP 13F *La Liaison Recherche-Developpement en Afrique de l'Ouest Francophone: L'Experience du Sénégal* par James Bingen et Jacques Faye. 1987. 32 pp. **(CDIE reference PN-AAZ-130)**
- RP 14 *Grain Marketing in Senegal's Peanut Basin: 1984/85 Situation and Issues* by Mark D. Newman. 1987. 16 pp. **(CDIE reference PN-AAZ-131)**
- RP 15 *Tradeoffs between Domestic and Imported Cereals in Senegal: A Marketing Systems Perspective* by Mark D. Newman, Ousseynou NDoye, and P. Alassane Sow. 1987. 41 pp. **(CDIE reference PN-AAZ-372)**
- RP 15F *Céréales Locales et Céréales Importées au Sénégal: La Politique Alimentaire a Partier Systemes de Commercialisation* par Mark D. Newman, Ousseynou NDoye, et P. Alassane Sow. 1987. 48 pp. **(CDIE reference PN-ABC-326)**
- RP 16 *An Orientation to Production Systems Research in Senegal* by R. James Bingen. 1987. 88 pp. **(CDIE reference PN-AAZ-373)**
- RP 16F *Orientation de la Recherche sur les Systemes de Productions au Sénégal* par R. James Bingen. 1987. 94 pp. **(CDIE reference PN-AAZ-374)**

REPRINT PAPERS

- RP 1 *The Private Sector Connection to Development* by Carl Liedholm. 1986. 19 pp. **(CDIE reference PN-AAW-353)**
- RP 2 *Influencing the Design of Marketing Systems to Promote Development in Third World Countries* by James D. Shaffer with Michael Weber, Harold Riley and John Staatz. 1987. 21 pp. **(CDIE reference PN-AAV-230)**
- RP 3 *Famine Prevention in Africa: The Long View* by Carl K. Eicher. 1987. 18 pp. **(CDIE reference PN-AAZ-119)**
- RP 4 *Cereals Marketing in the Senegal River Valley* by Michael L. Morris. 1987. 126 pp. **(CDIE reference PN-AAZ-120)**

-
- RP 17 *A Contribution to Agronomic Knowledge of the Lower Casamance (Bibliographical Synthesis)* by J.L. Posner. 1988. 47 pp. **(CDIE reference PN-AAZ-375)**
- RP 17F *Contribution a la Connaissance Agronomique de la Basse Casamance (Synthese Bibliographique)* par J.L. Posner. 1988. 47 pp. **(CDIE reference PN-ABC-167)**
- RP 18 *Acquisition and Use of Agricultural Inputs in the Context of Senegal's New Agricultural Policy: The Implications of Farmers' Attitudes and Input Purchasing Behavior for the Design of Agricultural Policy and Research Programs* by Valerie Auserehl Kelly. 1988. 30 pp. **(CDIE reference PN-AAZ-376)**
- RP 18F *Acquisition et Utilisation d'Intrants Agricoles dans le Contexte de la Nouvelle Politique Agricole du Sénégal: Implications des Attitudes et du Comportement d'Achat d'Intrants des Exploitants pour l'Elaboration d'une Politique Agricole et de Programmes de Recherches* par Valerie Auserehl Kelly. 1988. 35 pp. **(CDIE reference PN-AAZ-377)**
- RP 19 *Farmers' Demand for Fertilizer in the Context of Senegal's New Agricultural Policy: A Study of Factors Influencing Farmers' Fertilizer Purchasing Decisions* by Valerie Auserehl Kelly. 1988. 47 pp. **(CDIE reference PN-AAZ-378)**
- RP 19F *Demande d'Engrais de la Part des Exploitants dans les Contexte de la Nouvelle Politique Agricole au Sénégal: Une Etude des Facteurs Influençant les Decisions d'Achat d'Engrais Prises par les Exploitants* par Valerie Auserehl Kelly. 1988. 58 pp. **(CDIE reference PN-AAZ-379)**
- RP 20 *Production Systems in the Lower Casamance and Farmer Strategies in Response to Rainfall Deficits* by J.L. Posner, M. Kamuanga, and S. Sall. 1988. 33 pp. **(CDIE reference PN-ABC-162)**
- RP 20F *Les Systemes de Production en Basse Casamance et les Stratégies Paysannes Face du Deficit Pluviométrique* par J.L. Posner, M. Kamuanga, et S. Sall. 1988. 33 pp. **(CDIE reference PN-ABC-163)**
- RP 21 *Informing Food Security Decisions in Africa: Empirical Analysis and Policy Dialogue* by Michael T. Weber, John M. Staatz, John S. Holtzman, Eric W. Crawford, and Richard H. Bernsten. 1989. 11 pp. **(CDIE reference PN-ABE-627)**
- RP 21F *Comment Informer les Decisions Traitant de la Sécurité Alimentaire en Afrique: Analyses Empiriques et Dialogue Politique* par Michael T. Weber, John M. Staatz, John S. Holtzman, Eric W. Crawford, et Richard H. Bernsten. 1989. 13 pp. **(CDIE reference PN-ABD-104)**
- RP 22 *The Creation and Establishment of Production Systems Research in a National Agricultural Research Institute: The Senegal Experience* by Jacques Faye, James Bingen, and Etienne Landais. 1988. 25 pp. **(CDIE reference PN-ABC-161)**
- RP 23 *Foreign Trade of Agricultural Products and Inputs in Senegal from 1975 to 1984* by Frederic Martin and Alioune Dieng. 1988. 45 pp. **(CDIE reference PN-ABC-164)**
- RP 23F *Le Commerce Extérieur de Produits et d'Intrants Agricoles du Sénégal de 1975 a 1984* par Frederic Martin et Alioune Dieng. 1990. 45 pp. **(CDIE reference PN-ABF-529)**
- RP 24 *Regulatory Uncertainty and Government Objectives for the Organization and Performance of Cereal Markets: The Case of Senegal* by Mark D. Newman, P. Alassane Sow, and Ousseynou NDoye. 1988. 24 pp. **(CDIE reference PN-ABC-159)**
- RP 24F *Incertitude Réglementaire, Objectifs Gouvernementaux, Organisation et Performances des Marchés Céréalières: Le Cas du Sénégal* par Mark D. Newman, P. Alassane Sow, and Ousseynou NDoye. 1988. 24 pp. **(CDIE reference PN-ABC-160)**
- RP 25F *Etude sur la Commercialisation des Céréales dans la Région du Fleuve Sénégal: Méthodologie* par Michael Morris. 1988. 48 pp. **(CDIE reference PN-ABC-172)**
- RP 26 *The Regulation and Organization of Cereal Markets in Senegal: Report on the Marketing Campaigns of 1983/84 and 1984/85* by P. Alassane Sow and Mark D. Newman. 1988. 29 pp. **(CDIE reference PN-ABC-165)**
- RP 26F *La Réglementation et l'Organisation des Marchés Céréalières au Sénégal: Situation des Campagnes des Commercialisation 1983/84 et 1984/85* par P. Alassane Sow et Mark D. Newman. 1988. 35 pp. **(CDIE reference PN-ABC-166)**
- RP 27 *Farm Level Cereal Situation in Lower Casamance: Results of a Field Study* by C.M. Jolly, M. Kamuanga, S. Sall, and J.L. Posner. 1988. 35 pp. **(CDIE reference PN-ABC-157)**
- RP 27F *Situation Céréalière en Milieu Paysan en Basse Casamance: Résultats d'une Enquête de Terrain* par C.M. Jolly, M. Kamuanga, S. Sall, et J.L. Posner. 1988. 41 pp. **(CDIE reference PN-ABC-158)**
- *Annexe 1 Budgets de Culture et Analyse des Marges dans le Bassin Arachidier*. 1988. 134 pp. **(CDIE reference PN-ABC-169)**
- *Annexe 2 Budgets de Culture et Analyse des Marges au Sénégal Oriental et en Casamance*. 1988. 204 pp. **(CDIE reference PN-ABC-170)**
- *Annexe 3 Budgets de Culture et Analyse des Marges dans la Vallée du Fleuve Sénégal*. 1988. 214 pp. **(CDIE reference PN-ABC-171)**
- RP 29 *Agricultural Development and Policy in Senegal: Annotated Bibliography of Recent Studies, 1983-89* by Eric Crawford, R. James Bingen, and Malcolm Versel. 1990. 254 pp. **(CDIE reference PN-ABE-271)**
- RP 30 *Lowland Cropping Systems in the Lower Casamance of Senegal: Results of Four Years of Agronomic Research (1982-1985)* by Joshua Posner, Mulumba Kamuanga, and Mamadou Lo. 1990. 130 pp. **(CDIE reference pending)**
- RP 31 *Farming Systems Research in Southern Senegal: The Djibelo Experience (1982-1986)* by Mulumba Kamuanga and Joshua L. Posner. 1992. 57 pp. **(CDIE reference pending)**
-