
Digital Knowledge Resources for Agribusiness Development

J P S Ahuja

M R Rawtani

Abstract

The article attempts to describe the concept of Agribusiness and the role of mapping the appropriate knowledge for Agribusiness Development. Also listed are some of the important digital information sources in Agribusiness with a special reference to the India specific resources.

Keywords: Agribusiness, Directory, Subject Gateway, Agricultural Resources

0. Introduction

Agribusiness, as a concept, was born in Harvard University in 1957, with the publication of a book, A Concept of Agribusiness, under the joint authorship of J. Davis and R. Goldberg. The authors believe agribusiness is the sum total of all operations involved in the manufacture and distribution of farm supplies; production activities on the farm; and the storage, processing and distribution of farm commodities and items made from them.

During the past four decades, this concept has received increased attention. Various definitions of agribusiness have evolved, but they are still based on the original proposal by Davis and Goldberg. In recognizing the interpretation of agribusiness by the two pioneers, however, from systems perspective we should understand that agribusiness also includes related activities in government service provision, rural education and an effective system for knowledge management and its dissemination.

1. Agribusiness: Definitions

Agribusiness in the Anglophone context (e.g. in American universities) is understood as “the production operation of farms, the manufacture and distribution of farm equipment and supplies, and the processing, storage, and distribution of farm commodities.” Here, the term agribusiness is oriented towards the business of agriculture.

Agribusiness in the context of German agricultural administration and science is understood as “the way or mode of managing agricultural enterprises at the production, (input/output) distribution and processing levels”. Here, the term agribusiness is oriented towards agribusiness management, with a bias in favour of microeconomics and entrepreneurship. In accordance with recent development trends, the **GTZ** defines agribusiness as “all market and private business-oriented entities involved in the production, storage, distribution, and processing of agro-based products; in the supply of production inputs; and in the provision of services, such as extension, research etc.” In general this represents a more holistic approach to market-oriented entities in the agro-food system. In any case, the precise orientation is still very much determined by the actual situation in each of our partner countries, and is influenced by a wide range of environmental conditions and their different status. Agribusiness support considers it to be an integral part of a country’s economic development concept, and is targeted towards the creation of jobs and income in mainly rural areas. In line with a common business concept, the guiding principle is always the market orientation of all support activities. Agribusiness is an integral component of rural development, and forms part of a strategy to improve regional economic development and ensure a safe food supply.

- ✍ It aims to: address market and private business-oriented entities directly
- ✍ Stimulate business opportunities through improved frame conditions in primarily agricultural rural areas
- ✍ Ensure a safe and high-quality food supply for the consumer

2. Role of Knowledge for promoting Agribusiness

Agribusiness places increasing emphasis on knowledge as a competitive factor. On the one hand this means an interest in co-operation on fundamental research in pre-competitive phases, but on the other hand more contract research and secrecy in the application of knowledge.

As international forces increasingly make they felt, the national government will have to adopt new positions that regard the reinforcement of national qualities as a beneficial strategy. This includes support for a high quality knowledge infrastructure and provision of world-class research and training opportunities.

Knowledge institutions will be more market-oriented and therefore take a more international approach. This requires important changes in attitude on the part of researchers as well as institutions.

Knowledge (in the broadest sense and not just technology) is treated more and more as a crucial competition factor. ICT will contribute to the rapid development of worldwide networks. At the same time, international competition will intensify and will be felt in the national market as well. There will be an increase in scale and international consolidation of market positions, and investments and activity in local markets will increase all over the world. This means that in the future it will not be a matter of simply going along to local markets and selling products, but of establishing an ongoing presence in those markets; a matter not of disposing of standardized products worldwide, but of benefiting from the differences between all the local markets.

2.1 Challenges for agribusiness, government and knowledge institutions

An international perspective leads to a number of challenges for *agribusiness entrepreneurs*.

2.1.1 Challenges for agribusiness

- ✍ using knowledge as the crucial competition factor
- ✍ establishing links with sources of knowledge and co-innovators anywhere in the world
- ✍ operating in flexible, worldwide networks supported by ICT
- ✍ investing, manufacturing and distributing in widespread international markets
- ✍ taking advantage of raw material flows shifting to new markets

The challenges facing agribusiness also have a significant influence on strategic positioning of the national knowledge institutions:

2.1.2 Challenges for knowledge institutions

- ✍ making knowledge valuable in a competitive international environment
- ✍ vigorously developing their function as co-innovators for clients
- ✍ 'brokering and creating links' for bodies requesting international knowledge

3. New emphases for knowledge policy and knowledge management

Knowledge, knowledge policy as well as knowledge management from important components of strategies which companies, the government and knowledge institutions can use to respond to the changes in operating environment mentioned above.

From this study of globalization and internationalization, three areas of activity are put forward which require strengthening. Firstly, knowledge about changes in the world agro-food market should be thoroughly surveyed. Secondly, international recognition and acknowledgement of the quality of the agro-cluster should be reinforced. In short, the power of companies and knowledge institutions in the agro-cluster to attract interest should be consolidated. Thirdly, knowledge institutions should take advantage of the trend for companies to seek out interesting sources of knowledge and co-innovators worldwide.

This presents knowledge institutions with an enormous challenge: to build up international positions and to make knowledge into a valuable commodity.

These themes for knowledge development and new conditions for the knowledge infrastructure are explained below.

3.1 Themes for knowledge development

a) The world agro-food market: new dimensions and configurations

This theme's key question is how, in global terms, the world market may change in the coming decades under the influence of technological revolutions (including ICT) and economic-political decision-making processes. What do the conceivable changes mean for the various sectors and functions (such as production, trade and distribution) in the context of Indian agribusiness? What are the consequences and possibilities of the flexible worldwide networks now taking shape for the position, function, operation and organisation of agribusiness companies?

3.2 New conditions for the knowledge infrastructure

a) Creating an international professional training centre for agribusiness top management in India

From the point of view of strengthening the international position of the Indian agribusiness knowledge base, it is necessary to assume a leading position in a number of selected and well-defined areas. Apart from the strong ICT work force that already exists, consolidation of knowledge base is required in the field of international enterprise, focusing on agriculture and world food needs.

Agribusiness is the *key player* in the arena of international business. There are also two other important players: the government and the public knowledge institutions. Internationalisation and globalisation will change the environment in which each of these players operates. Moreover there will be both interaction and differences in action resulting from the players' different positions.

4. Digital Knowledge Resources for Agribusiness

Agribusiness knowledge resources can be classified as :

1. Agribusiness sites on the Internet (<http://lisweb.curtin.edu.au/web/agbustpts.html>" # "agribussites)

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2. Agribusiness dictionaries, handbooks, etc.([#"agribusreadyref\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 3. Electronic journals ([#"agribusejnl\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 4. Annual Reports ([#"annual reports\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 5. Conferences ([#"agribusconferences\)](http://lisweb.curtin.edu.au/web/agbustpts.html) Up and coming conferences, Papers available on the Internet
 6. Discussion lists/Newsgroups ([#"agribuselists\)](http://lisweb.curtin.edu.au/web/agbustpts.html) Groups which you can join via electronic mail, Newsgroups (similar to bulletin boards)
 7. General Resources ([#"aggen\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 8. Specific Resources([# agspec\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 9. Agriculture ([# agriculture\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 10. Aquaculture ([#"aquaculture\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 11. Crop Protection ([#"crop protection\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 12. Crops ([#"crops\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 13. Economics and Finance ([# economics\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 14. Horticulture ([#"horticulture\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 15. Legal Resources ([# law\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 16. Livestock ([#"livestock\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 17. Management ([#"management\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 18. Marketing ([#"marketing\)](http://lisweb.curtin.edu.au/web/agbustpts.html)
 19. Viticulture ([# viticulture\)](http://lisweb.curtin.edu.au/web/agbustpts.html)

5. Exampales for Each type of Agribusiness Categories

5.1 General Resources

1. Agriculture@Internets (<http://www.internets.com/agri.htm>) Huge listing of agricultural websites and databases
2. Agrisurf (http://www.agrisurf.com/agrisurfscripsts/agrisurf.asp?index=_25)

5.2 Specific Resources

5.2.1 Agriculture

1. agLINKS (http://www.agpr.com/agpr_htmls/aglinks.html)
2. AgNIC - Agriculture Network Information Cente (<http://www.agnic.org/>)
3. Agricola (<http://www.nal.usda.gov/ag98/>) A bibliographic database of citations to the agricultural literature created by the National Agricultural Library and its cooperators.
4. Agrisurf - the Farmers Search Engine (<http://www.agrisurf.com/>)
5. Agriculture Western Australia (<http://www.agric.wa.gov.au/>)
6. Agricultural Pests and Feral Animals (<http://www.affa.gov.au/content/output.cfm?ObjectID=D2C48F86-BA1A-11A1-A2200060B0A06275>)
7. Agrigate (<http://www.agrigate.edu.au/>) An Agricultural Information Gateway for Australian Researchers.

8. Agripedia. (<http://www.ca.uky.edu/agripedia/>) College of Agriculture Kentucky University Agricultural Links.
9. AgriWeb (<http://www.ruralnet.com.au/AgriWeb/>)
10. AgView (<http://www.agview.com/>)
11. American Society of Agricultural Engineers (<http://199.97.51.12/>)
12. Australian Centre For International Agricultural Research (<http://www.aciar.gov.au/>)
13. Australian Collaborative Land Evaluation Program (<http://www.cbr.clw.csiro.au/aclep/>)
14. Australian Farming Virtual Library (<http://farrer.csu.edu.au/AFVL/>)
15. Australian Surveying and Land Information Group (<http://www.auslig.gov.au/>)
16. Canada Agriculture Online (<http://www.agcanada.com/>)
17. The Farm Shed (<http://www.thefarmshed.com.au/index.jhtml>)
18. Food & Fertilizer Technology Center. (<http://www.fft.c.agnet.org/>)
19. Natural Resource Management (<http://dpi.e.gov.au/content/output.cfm?ObjectID=3E48F86-AA1A-11A1-B6300060B0AA00011>)
20. USDA Economic Research Service.(<http://www.ers.usda.gov/>)The United States Department of Agriculture official source of economic analysis and information on agriculture in rural America.
21. WWW Virtual Library - Agriculture (<http://cipm.ncsu.edu/agvl/>)

5.2.2 Aquaculture

1. Australian Aquaculture Centre (<http://www.aquaculture.com.au/>)
2. Australian Fisheries Management Authority (<http://www.afma.gov.au/>)
3. Australian Seafood Industry Council (<http://www.asic.org.au/>)
4. Fisheries and Oceans Canada Pacific Region (<http://www.pac.dfo-mpo.gc.ca/>)
5. Fisheries Research and Development Corporation (<http://www.frdc.com.au/>)
6. Fisheries Western Australia (<http://www.wa.gov.au/westfish/>)
7. Florida Bureau of Seafood and Aquaculture.(<http://www.fl-aquaculture.com/>)
8. Harbor Branch Oceanographic Institution (<http://www.hboi.edu/aquaculture.html>)
9. NetVet Aquaculture Sites(<http://netvet.wustl.edu/fish.htm> \l "aquaculture/)
10. NOAA Fisheries: U.S Dept. of Commerce National Oceanic and Atmospheric Administration (<http://www.nmfs.noaa.gov/>)
11. Ozefish Info:Australian Aquaculture and Fisheries Information (<http://www.ozefish.com.au/>)
12. Purdue University Aquaculture Links (<http://www.fnr.purdue.edu/fi/mason/links.html>)
13. Tasmanian Salmonid Production (<http://www.utas.edu.au/docs/aquaculture/salmon/>)
14. World Aquaculture Society (<http://www.was.org/>)

5.2.3 Crop Protection

1. Biological Control Virtual Information Centre (<http://ipmwww.ncsu.edu/biocontrol/>) An excellent site providing access to a wide range of resources relevant to researchers, students and professionals.
2. The British Society for Plant Pathology.(<http://www.bspp.org.uk/>)
3. Entomology on World Wide Web.(<http://insects.tamu.edu/entoweb/>)

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4. Global Crop Pests. (<http://www.nysaes.cornell.edu/ent/hortcrops/english/>) This Cornell International Institute for Food, Agriculture and Development site provides links regarding crop pest diagnosis and IPM information capability among extensionists and farmers of developing countries.
 5. International Survey of Herbicide-Resistant Weeds(<http://weeds-science.com/>)
 6. North Carolina National IPM Network - Pest Identification (http://ipmwww.ncsu.edu/PEST_ID/pestid.html)
 7. Which Weed? (<http://www.tassie.net.au/TVWS.Weeds>) Tamar Valley Weed Strategy Working Group.

5.2.4 Crops

1. Agricultural Production Systems Research Unit (<http://www.apsru.gov.au/>)
2. Alberta Agriculture, Food and Rural Development (<http://www.agric.gov.ab.ca/index.html>)
3. Australasian Tree Crops Sourcebook on-line (<http://www.aoi.com.au/atcros/>)
4. Australian Cotton Cooperative Research Centre. (<http://www.cotton.pi.csiro.au/>)
5. Australian New Crops Project (<http://www.newcrops.uq.edu.au/>)
6. Canola Information Service (<http://www.canolainfo.org/html/links.html>) This Canadian site provides links to statistics, processing, biotechnology and organisations.
7. Dilmah Tea. (<http://www.dilmahtea.com/plant-pot/plant-pot.htm>) This site provides information regarding the processes involved from tea plant to tea pot.
8. Grain Zone - Grains Research and Development Corporation (<http://www.grdc.com.au/>)
9. International Crops Research Institute for the Semi-Arid Tropics (<http://www.cgiar.org/icrisat>)
10. International Rice Research Institute (<http://www.cgiar.org/irri/>)
11. Irrigation sites (http://au.yahoo.com/Science/Agriculture/Crops_and_Soil/Irrigation/)
12. Listing of Useful Plants of the World (<http://www.newcrops.uq.edu.au/listing/listingindex.htm>)
13. NewCROP (<http://www.hort.purdue.edu/newcrop/home>)
14. Pulse Australia (<http://www.pulseaus.com.au/>)
15. Rice Web : a compendium of facts and figures from the world of rice.(<http://www.riceweb.org/>)
16. The Tea Council Online.(<http://www.teacouncil.co.uk/>)

5.2.5 Economics and Finance

1. Agribusiness and Agriconomics (<http://www.lib.lsu.edu/bus/agbus.html>) Louisiana State University
2. Austrade Online (<http://www.austrade.gov.au/>)
3. Australian Agriculture, Fisheries and Forestry - Economics(<http://www.affa.gov.au/content/output.cfm?ObjectID=3E48F86-AB1C-11A1-B6300060B0AA00003>)
4. Australian Bureau of Statistics (<http://www.abs.gov.au/>)
5. Australian Stock Exchange (<http://www.asx.com.au/>)
6. Australian Dept of Foreign Affairs & Trade (<http://www.dfat.gov.au/>)
7. The Chicago Board of Trade (<http://www.cbot.com/cbot/www/main/0,1394,,00.html>)
8. Chicago Mercantile Exchange (<http://www.cme.com/>)
9. Cotstat and Community Cycle Analytics (<http://www.cotstat.com/>)
10. FAO Statistics (http://apps.fao.org/lim500/Agri_db.pl) This sites provides international statistical data on crops and livestock primary and processed.

11. FinancialWeb (FINWeb) (<http://www.finweb.com/>) A financial economics WWW server with links to journals, working papers, databases and other Internet resources.
12. Reserve Bank Bulletins (<http://www.rba.gov.au/PublicationsAndResearch/Bulletin/index.html>)
13. Sydney Futures Exchange (<http://www.sfe.com.au/>)
14. Teague Australia Seed and Grain Brokers - Production Statistics - Grain (<http://www.tjt.com.au/tjt/statisticsp.html?ptype=Grain>)
15. Teague Australia Seed and Grain Brokers - Production Statistics - Seed (<http://www.tjt.com.au/tjt/statisticsp.html?ptype=Seed>)
16. United States Department of Agriculture Economics Research Service (<http://www.econ.ag.gov/>)
17. The Universal Currency Converter (<http://www.xe.net/currency/>)
18. The World Bank Group. (<http://www.worldbank.org/>)

5.2.6 Horticulture

1. Aggie Horticulture. (<http://aggie-horticulture.tamu.edu/>) Information Server of the Texas Horticulture Program at Texas A&M University.
2. Apple Information Manager (<http://orchard.uvm.edu/aim/default.html>) This University of Vermont site includes links to various sites including Pest Management.
3. Australian Citrus Growers Association (<http://www.farmwide.com.au/nff/acg/acg.htm>)
4. Australian Macadamia Society(<http://www.macadamias.org/>)
5. Australian Olive Association (<http://www.australianolives.com.au/>)
6. Bureau of Postharvest Research and Extension - Phillipines (<http://www.bphre.com/>)
7. Chile Pepper Institute (<http://www.chilepepperinstitute.org/>)
8. Floriculture.com (<http://www.floriculture.com/>)
9. Fruits of Warm Climates (www.hort.purdue.edu/newcrop/morton/index.html) The full text of this book, by Julia Morton, originally published in 1987.
10. Horticulture Australia. (<http://www.horticulture.com.au/>)
11. Horticulture & Crop Science in Virtual Perspective (<http://www.hcs.ohio-state.edu/>)
12. Plant Breeder's Rights (<http://www.dppe.gov.au/content/output.cfm?ObjectID=D2C48F86-BA1A-11A1-A2200060B0A05727>)
13. Purdue University Horticultural Web Sites. (<http://www.hort.purdue.edu/hort/other>)
14. Sydney Postharvest Laboratory. (<http://www.postharvest.com.au/>)
15. The Ukexnet Horticultural Index (<http://www.ukexnet.co.uk/hort/>)

5.2.7 Legal Resources

1. Agriculture Law (www.agriculturelaw.com/) A United States site that provides insight to current issues for American farmers.
2. Australasian Legal Information Institute (AUSTLII) (<http://www.austlii.edu.au/>) Access to Australian primary and secondary legal materials including legislation and cases.
3. Australian Bills Net (<http://www.aph.gov.au/parlinfo/billsnet/main.htm>)
4. Australian Federal Government Transcripts (<http://www.aph.gov.au/hansard/>)
5. UniServe Law (<http://uniserve.edu.au/law/Welcome.html>) An electronic clearinghouse facilitating access to resources for teachers and students in law.
6. SCALEplus (<http://scaleplus.law.gov.au>) A legal information retrieval system owned by the Australian Attorney General's Dept.

5.2.8 Livestock

1. Animal Health Australia (www.aahc.com.au/) Animal Health Australia - provides statistics and information about animal health in Australia.
2. Agricultural Business Research Institute - BREEDPLAN. (<http://abri.une.edu.au/bplan.htm>) This is a beef cattle genetic evaluation system. It covers a wide range of traits including birth weight, calving ease, growth, milking ability, fertility and carcase information.
3. AgriOne Cattle Links (<http://www.agrione.com/cattle.html>)
4. AgriOne Pork Links (<http://www.agrione.com/porklinks.html>)
5. AgriOne Sheep Links (<http://www.agrione.com/sheep.html>)
6. The Angus Society of Australia (<http://www.angusaustralia.com.au>)
7. Association for the Advancement of Animal Breeding and Genetics Inc. (<http://agbu.une.edu.au/~aaabg/>)
8. Australian Dairy Corporation (<http://www.dairycorp.com.au/>)
9. Australian Limousin Breeders Homepage (<http://www.northnet.com.au/~limo/>)
10. Australian Ostrich Association (<http://www.aoa.asn.au/general.htm>)
11. Australian Poll Hereford Society (<http://www.pollhereford.com.au/>)
12. Breeders World (<http://www.breedersworld.com/>) A Livestock Directory with excellent links to Beef, Sheep and Swine Websites.
13. Cattle Council of Australia (http://bioag.byu.edu/zoology/crandall_lab/crayfish/crayhome.htm)
14. Deer Industry Association of Australia (<http://www.diaa.org/>)
15. Farmwide Cattle Links (<http://www.farmwide.com.au/links/search.asp?query=CATTLE>)
16. Meat and Livestock Australia (<http://www.mla.com.au/>)
17. Meat Net (<http://www.aginfo.com.au/htms/meatlinx.htm>)
18. NSW Meat Industry Authority (<http://www.meat.nsw.gov.au/>) This site includes saleyard statistics.
19. NetVet Cow Sites (<http://netvet.wustl.edu/cows.htm>)
20. NetVet Dog Sites (<http://netvet.wustl.edu/dogs.htm>)
21. NetVet Horse Sites (<http://netvet.wustl.edu/horses.htm>)
22. NetVet Pig Sites (<http://netvet.wustl.edu/pigs.htm>)
23. NetVet Poultry Sites (<http://netvet.wustl.edu/birds.htm> \ "poultry")
24. NetVet Sheep Sites (<http://netvet.wustl.edu/smrums.htm> \ "sheep")
25. NetVet Small Ruminants Sites (<http://netvet.wustl.edu/smrums.htm>)
26. The Pork Council of Australia (<http://www.pca.org.au/>)
27. Product Integrity and Chemical Usage (<http://www.xtra.com.au/picu>)
28. Sheep'o - Australian Sheep and Wool Industries on the Web (www.aussiesheep.com/)
29. Sheep Resources (<http://www.ansi.okstate.edu/library/sheep.html>)
30. Simmental Australia (<http://www.simmental.com.au/home.html>)
31. Swine Net (<http://www.swine.net/>)
32. Wool.com - Everything Wool (<http://www.wool.com/>)
33. WorldMeat (<http://www.worldmeat.com.au/>)

5.2.9 Management

1. Australian Institute of Management (<http://www.aim.com.au/>)

2. Department of Agriculture, Fisheries and Forestry - Operating Environment (<http://www.affa.gov.au/taxreform/>)
3. Knowledge Inc. (<http://www.webcom.com/quantera/>)
4. Knowledge Management for the New World of Business (<http://www.brint.com/km/whatis.htm/>)
5. Knowledge Management. A WWW Virtual Library on Knowledge Management. (<http://www.brint.com/km/>)
6. Yahoo - Business and Economy (http://www.yahoo.com/Business_and_Economy/)
7. Yahoo-Farm Management (<http://search.yahoo.com/bin/search?p=farm+management&y=y&e=578870&f=0%3A2766678%3A2718086%3A159860%3A159869%3A160068%3A578870&r=Regional%02Countries%02Australia%02Science/>)

5.2.10 Marketing

1. Agriculture online - Markets (<http://www.agriculture.com/markets/>)
2. Australian World Wide Wool Information and Marketing Service (<http://www.wool.net.au/>)
3. Business Entry Point (<http://www.business.gov.au/>) This Australian Commonwealth Government site has links to starting a business, drafting business plans, employing staff and taxation.
4. Market Asia (<http://www.fintrac.com/rap/>)
5. Today's Market Prices (<http://www.todaymarket.com/>) This sites provides prices of agricultural products from around the world.
6. World Bank Commodity Prices (<http://www.worldbank.org/prospects/pinksheets/>)

5.2.11 Viticulture

1. Australian National Wine & Grape Industry Centre. (<http://www.csu.edu.au/research/rpcgwr/nwgic.htm>)
2. Australian Wine Research Institute (<http://www.awri.com.au/flash.html>)
3. Australian Wine Online (<http://www.winetitles.com.au/wineonline.html>)
4. AusVit Vineyard Management System. (<http://www.csu.edu.au/research/rpcgwr/ausvit/>)
5. Co-operative Research Centre for Viticulture (<http://www.crcv.com.au/>)
6. Eco-Rating International: Eco Survey of California Vineyards and Wineries (<http://www.eco-rating.com/sces.html>)
7. University of California Davis Department of Viticulture & Enology. Wine and Grape Information (<http://wineserver.ucdavis.edu/winegrape/index.htm>)
8. Wine of Australia (<http://www.wineaustralia.com.au/>)

5.3 Agribusiness Dictionaries, Handbooks etc.

1. Australian Financial Review Dictionary of Investment Terms. (<http://www.county.com.au/web/webdict.nsf/pages/index>)
2. Campbell R. Harvey's Hypertextual Finance Glossary - Duke University (<http://www.duke.edu/~charvey/Classes/wpg/glossary.htm>)
3. New York Mercantile Exchange Glossary (<http://www.nymex.com/refernce/glossary.htm>)
4. Ohio State University Plant Dictionary (<http://www.hcs.ohio-state.edu/plants.html>)
5. Typesetting & Publishing Glossary (<http://www.sos.com.au/files/glosray.html>)

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6. Soil Science Society of America - Soil Glossary (<http://www.soils.org/sssagloss/>)
 7. Wisconsin Department of Natural Resources Glossary of Lake and Water Terms (<http://www.dnr.state.wi.us/org/water/fhp/lakes/laketerm.htm>)

5.4 Agribusiness Electronic Journals

Electronic Journals vary considerably in accessibility, format and scope. Some will only be available by subscription others will be free; some will be full of hyperlinks others will be a replica of the print version; some will only give contents pages. This is still a developing area in the publishing world and uneven quality will be with us for some time. The suggestions below may prove useful in finding appropriate electronic journals in your area of interest.

5.4.1 General Electronic Journal Sites

1. The World-Wide Web Virtual Library: Electronic Journals (<http://vlib.org/>)
2. Elsevier Science Agricultural and Biological Sciences Home Page (<http://www.elsevier.com/homepage/browse.htm?mode=basic&key=SSAN>) This site provides access to information on print and electronic publications.
3. Contents Direct (<http://www.elsevier.nl/locate/ContentsDirect>) This is a free e-mail alerting service for Elsevier Science Journals.
4. Australian PC Magazine (<http://apcmag.com/>)
5. Reserve Bank Bulletins (<http://www.rba.gov.au/PublicationsAndResearch/Bulletin/index.html>)
6. Science Komm (<http://www.sciencekomm.at/journals/agric.html>) A large number of agribusiness journals can be sourced via this service.

5.4.2 Specific Agribusiness Electronic Journal Sites

1. Agricultural Outlook (<http://www.ers.usda.gov/epubs/pdf/agout/ao.htm/>)
2. Agricultural Research Magazine (<http://www.ars.usda.gov/is/AR/>)
3. Agriculture Online (<http://www.agriculture.com/>)
4. Agricultural Economics (<http://www.elsevier.com/homepage/sae/econbase/agecon/menu.sht>)
5. Agricultural Economics Virtual Library: Journals & Research (<http://www.agecon.com/index.htm>)
6. American Journal of Enology and Viticulture (<http://www.ajev.com/>)
7. Australian Agribusiness Review (<http://www.agribusiness.asn.au/review/index.htm>)
8. Australian and New Zealand Wine Industry Journal (<http://www.winetitles.com.au/wij/index.html>)
9. Australian Journal of Grape and Wine Research Online (http://www.asvo.com.au/front_ajgrw.html)
10. Australian National University Department of Economics Working papers in Economics and Econometrics (<http://ecocomm.anu.edu.au/economics/misc/working.html>)
11. Better Farming (<http://www.betterfarming.com/index.htm>)
12. BRW (<http://www.brw.com.au/>) Business Review Weekly.
13. CAE working paper series (<http://www.farmlandinfo.org/cae/wp/caewpabs.html>) Centre for Agriculture in the Environment
14. Canola Guide Magazine Online (<http://www.agcanada.com/cn/cn.htm>)
15. Co-operative Research Centre for Viticulture Newsletter (http://www.crcv.com.au/index_n.html)
16. CSIRO Journals (<http://www.publish.csiro.au/journals/samples.cfm>)

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17. Farm Journal Today (<http://www.farmjournal.com/>)
 18. Farmers Weekly Interactive (<http://www.fwi.co.uk/>)
 19. Food and Fertilizer Technology Centre Newsletter (<http://www.ffc.agnet.org/library/list/pub/nl.html>)
 20. Journal of Agribusiness (<http://www.agecon.uga.edu/~jab/jabs.htm>)
 21. Journal of Animal Science. (<http://www.asas.org/jas/>)
 22. Journal of the International Association of Agricultural Economists (<http://www.ag.iastate.edu/journals/agecon/jpage/home.html>)
 23. Olives Australia (<http://www.oliveaustralia.aust.com/>)
 24. Poultry Science Journal (<http://www.psa.uiuc.edu/toc.html>)
 25. Progressive Farmer (<http://www.progressivefarmer.com/>)
 26. RIRDC Research Reports (<http://www.rirdc.gov.au/reports/>)
 27. Wine Business Monthly (<http://winebusiness.com/html/monthlycover.cfm>)

5.5 Annual Reports

A useful way of accessing company information is accessing company annual reports over the Internet.

1. Agriculture Western Australia (<http://www.agric.wa.gov.au/segments.asp?cid=453&pid=1&pg=1>)
2. Tropical Savannas CRC - Annual Reports (<http://savanna.ntu.edu.au/centre/annrep.html>)

5.6 Agribusiness Conferences

While there is somewhat of a trend for conferences to be held via the Internet it is most common for conferences to be held in the traditional style. The suggestions below are some of the ways of finding out what conferences are happening. It is now very common for a conference to have a web page giving considerable pre-conference information including pre-prints in some cases.

5.6.1 General Conference Sites

1. Internet Conferences and Events (<http://www.loc.gov/global/internet/conference.html>)

5.6.2 Specific Conference Sites for Agribusiness

1. Yahoo - Agribusiness Conferences and Trade Shows (http://dir.yahoo.com/Business_and_Economy/Business_to_Business/Agriculture/Conventions_and_Trade_Shows/)
2. Agricultural Conferences, Meetings and Seminars Calendar (<http://www.agnic.org/mtg/>) The Agricultural Conferences, Meetings, Seminars Calendar (AgCal) provides a central repository for information and links to information concerning agricultural conferences of scientific significance.
3. All Conferences.Net (<http://all-conferences.net/>)
4. The International Association of Agricultural Economists (IAAE)Upcoming Conferences. (<http://www.iaae-agecon.org/conferences.asp>)

5.7 Agribusiness Discussion Lists

To learn how to subscribe to Discussion Lists you may want to try a guide first:

1. E-Mail Discussion Groups and Lists - Resources (<http://www.webcom.com/impulse/list.html>)

5.8 General Directories of Email Discussion Lists

1. Topica: Email newsletters and discussion groups (<http://www.liszt.com/>)

5.9.1 Some Indian Web-Sites on Agribusiness

1. Agriwatch
Description: Agricultural and food commodity-oriented market tracking service; offers consulting and subscription...
<http://www.agriwatch.com/>
2. **Agribusiness to India**
http://www.austrade.gov.au/ci_template/0,1114,MetaRID%253DPWB193022,00.html
3. **India's Premier web site on Agribusiness**
Your gateway to Indian Agribusiness with online bulletin board for trade enquiries and crop and market information
<http://www.agroindia.org/>
4. Indian Society of **Agribusiness** Professionals
Description: Indian Society of **Agribusiness** Professionals (ISAP) aims to satisfy the needs of the farming community...
<http://www.isapindia.org/>
5. Agriculture Gateway for **India** - Economics
<http://web.aces.uiuc.edu/aim/diglib/india/economics.htm>
6. Agro Tech - conferences
These Conferences have been structured as a Global Forum for Food and Agribusiness n India with significant international participation to position India
<http://www.agrotech-india.com/cnfrnce.htm>

5.9.2 Online Indian Agribusiness Publications

1. <http://www.indiancommodity.com>
2. <http://www.ikisan.com>
3. <http://www.krishiworld.com>
4. <http://www.krishiudyog.com>
5. <http://www.soyachaupal.com>
6. <http://www.indiaagronet.com>
7. <http://www.agroconnect.com>

5.10 List of some e-journals on Agribusiness

Title

1. AgExporter - online (ProQuest)
2. Alaska journal of commerce - online (ProQuest)
3. American Economic Association Quarterly - online (JSTOR)
4. American economic review - online (JSTOR)

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5. American economist - online (Ebsco Publishing)

These journals are available through the content providers such as Ebsco, ProQuest, Eco, Catchword, JSTOR as indicated above.

6. References

1. agLINKS (http://www.agpr.com/agpr_htmls/aglinks.html)
2. AgNIC - Agriculture Network Information Center (<http://www.agnic.org/>)
3. Agricola (<http://www.nal.usda.gov/ag98/>) A bibliographic database of citations to the agricultural literature created by the National Agricultural Library and its cooperators.
4. Agrisurf - the Farmers Search Engine (<http://www.agrisurf.com/>)

About Authors

Mr. J P S Ahuja is Manager, Department of Information Systems and Computer Services at NABARD, Head Office, Bandra-Kurla Complex, Mumbai and Research Scholar at the Department of Library and Information science, University of Rajasthan, Jaipur.

E mail : ahujajps@sify.com or jpsahuja@indiatimes.com

Dr. M R Rawtani is Associate Professor and Head of the Department of Library and Information Science, University of Rajasthan, Jaipur. He has presented number of papers in seminar, conferences and journals. He is also a member of many professional bodies.

Email :rawtanimr_jaipur@sancharnet.in