

Agricultural Research

<p>Fan, S., Chan-Kang, C., Quian, K., and Krishnaiah, K. 2003. "National and international agricultural research and rural poverty: the case of rice research in India and China". EPTD Discussion Paper 109, International Food Policy Research Institute (IFPRI). 2003 http://www.ifpri.org/divs/eptd/dp/papers/eptdp109.pdf</p>	<p>The study attempts to measure the total benefits from rice varieties improvement research in China and India using variety improvement and adoption data over a period of twenty years. It also assesses the impact of national and international research on poverty reduction in rural India and China.</p>
<p>Hazell, P. and Haddad, L. 2001. "Agricultural research and poverty reduction". Food, Agriculture, and the Environment Discussion Paper 34, International Food Policy Research Institute (IFPRI). August 2001 http://www.ifpri.org/2020/dp/2020dp34.pdf</p>	<p>The paper addresses the question "What can public agricultural research systems that serve developing countries do to increase the poverty reducing impact of their investments?"</p>
<p>Fan, S., Fang, C., and Zhang, X. 2001. "How Agricultural Research Affects Urban Poverty in Developing Countries: The Case of China". EPTD Discussion Paper No.83. IFPRI, October 2001. http://www.ifpri.org/divs/eptd/dp/papers/eptdp83.pdf</p>	<p>The study develops a framework to measure the impact of agricultural research on urban poverty. It analyses China's public investment in agricultural research from 1953 to 1997.</p>
<p>Zhang, X. and Fan, S. 2000. "Public Investment and Regional Inequality in Rural China". EPTD Discussion Paper No.71. IFPRI, Washington, DC. December 2000. http://www.ifpri.org/divs/eptd/dp/papers/eptdp71.pdf</p>	<p>The paper develops a method for decomposing the contributions of various types of investments on regional inequality in China. Investments in rural education and agricultural R&D have the largest and most favorable impact of reducing regional inequality.</p>
<p>Omamo, S. W. et al. 2006. "Strategic Priorities for Agricultural Development in Eastern and Central Africa". Research Report 150, IFPRI, 2006. http://www.ifpri.org/pubs/abstract/150/rr150.pdf</p>	<p>The report identifies how eastern and central African countries can stimulate agricultural growth. Using agricultural R&D as an illustration, the study identifies significant returns to regional cooperation in agricultural development.</p>
<p>Pardey P.G. and Roseboom J., 1989. "Agricultural research indicator series: A global data base on national agricultural research systems". International Service for National Agricultural Research. Cambridge University Press, 1989. (1 copy available at CGIAR - CGIAR Information Services in STACKS. Ref. S541 .P37 1989)</p>	
<p>Pardey, P. G., Craig, B. 1989. "Causal Relationships between Public Sector Agricultural Research Expenditures and Output". American Journal of Agricultural Economics, 1989 http://www.jstor.org/view/00029092/ap040110/04a00030/0</p>	<p>The study uses In-sample granger tests along with post sample predictive tests and suggests that simultaneity issues should not be ignored when modeling the research expenditure output relationship. It also discusses the issue lagged impact of research expenditures on agricultural output.</p>
<p>Huffman W.E. and Just R.E. "Agricultural Research: benefits and Beneficiaries of alternative funding mechanisms". <i>Review of Agricultural Economics</i>, Vol. 21, No. 1. (Spring - Summer, 1999), pp. 2-18. http://www.jstor.org/view/10587195/ap040022/04a00020/0</p>	<p>The article analyses alternative funding mechanisms for agricultural research and the benefits and beneficiaries of these approaches. It is based on evidence from the USA.</p>
<p>Rose-Eckerman S. and Evenson R. 1985. "The political economy of agricultural research and</p>	<p>The paper seeks to identify the economic and political factors that produce state</p>

<p>extension: Grants, votes, and reapportionment". American Journal of Agricultural Economics, Vol. 67, No. 1. (Feb., 1985), pp. 1-14 http://www.jstor.org/view/00029092/ap040090/04a00020/0</p>	<p>financial support for agricultural research and extension in the United States.</p>
<p>ISNAR. "Financing Agricultural Research: A Source Book". (International Service for National Agricultural Research Website) http://www.isnar.cgiar.org/publications/books/FSB.htm</p>	<p>Contains various relevant articles.</p>
<p>Alston, J. M., Pardey, P. G. and Roseboom, J. 1998. "Financing Agricultural Research: International Investment Patterns and Policy Perspectives". <i>World Development Vol.26. No.6 pp.1057-1071, 1998.</i> http://www.sciencedirect.com/science/article/B6VC6-3TSB4YX-B/2/f40ab4701a24b488800e758b978727d9</p>	<p>The article documents recent changes in public involvement in R&D, focusing on the public and rapidly evolving private roles in financing agricultural R&D, and the international dimension of these funding and policy issues. The authors conclude the article with some reflections of the implication of all these changes for internationally conceived and publicly funded agricultural R&D.</p>
<p>Pardey, P. G., Roseboom, J., and Craig, B. J. 1992. "A Yardstick for International Comparisons: An application to national Agricultural research Expenditures". <i>Economic Development and Cultural Change</i>, Vol. 40, No. 2. (Jan., 1992), pp. 333-349 http://www.jstor.org/view/00130079/ap040175/04a00050/0</p>	<p>The article focuses on dealing with the problem of making international comparisons that emanates from the nature of the available data. It describes some practical options and demonstrates the non-trivial consequences of different conversion and deflation procedures on data series on national agricultural research expenditures.</p>
<p>Echeverria, R. G., Trigo, E. J. and Byerlee, D. 1996. "Institutional change and effective financing of agricultural research in Latin America". http://www.worldbank.org/afr/aftsr/sfi09.pdf</p>	<p>The paper reviews institutional changes and innovative mechanisms for funding agricultural research in Latin America.</p>
<p>Romano, R.E. 1991. "The Optimal R&D Policy: Patents, Public Funding, or Both". <i>Southern Economic Journal</i>, Vol. 57, No. 3. (Jan., 1991), pp. 703-718 http://www.jstor.org/view/00384038/ap030223/03a00100/0</p>	<p>The paper analyses the second best R&D policy where the excess social costs of patents and public funding are considered. It examines the optimal R&D policy with a focus on the choice of public funding or patent protection, each carrying its own social costs, or a combination of both.</p>
<p>Steven R. Tabor. "Finance Policy for Agricultural Research" (Financing Agricultural Research: A sourcebook) http://www.isnar.cgiar.org/publications/pdf/FSB/fsb-1.pdf</p>	<p>Chapter 1 discusses how policy makers can assess whether the level of aggregate research funding is appropriate; Chapter 2 & 3 discuss ways in which policies affecting capital & recurrent spending in agricultural research can be crafted to avoid suboptimal use of resources; and Chapter 6 discusses aid funds for agricultural research are utilized effectively.</p>
<p>Alston, J.M., Chan-Kang, C., Mara, M.C., Pardey, P.G. and Wyatt, T. 2000. "A Meta Analysis of Rates of Return to Agricultural R&D". IFPRI, 2000. http://www.ifpri.org/pubs/abstract/113/rr113.pdf</p>	<p>The study assembles all available evidence on returns to investments in agricultural R&D published since 1953. The rates of return evidence is analyzed with a view to determining the characteristics deemed likely to influence the true or measured return to agricultural R&D.</p>
<p>Bruse L. G. 1999. "Returns to policy related social research in agriculture". Impact Assessment Discussion Paper No.9, IFPRI, May 1999. http://www.ifpri.org/impact/iadp09.pdf</p>	<p>The paper discusses analytical methods of measuring returns to policy research. It also discusses case studies, from United States, on the value of publicly provided information; and rate of return to agricultural research.</p>

<p>Alston J.M., Pardey, P.G., Smith, V.H. (eds.). "Book Review: Paying for Agricultural Productivity" <i>European Review of Agricultural Economics</i>, Vol.27 (3) (2000) pp.401-403. http://erae.oxfordjournals.org/cgi/reprint/27/3/401</p>	<p>The article deals with the institutional arrangements and policy instruments available for agricultural R&D within the countries, their impacts on agricultural productivity and the shortcoming of existing agricultural R&D policies.</p>
<p>Norton, G. W. and Davis, J.S. 1981 "Evaluating returns to agricultural research: A Review". <i>American Journal of Agricultural Economics</i>, Vol. 63, No. 4. (Nov., 1981), pp. 685-699 http://www.jstor.org/view/00029092/ap040072/04a00110/0</p>	<p>The paper reviews and compares the most common used approaches used to evaluate agricultural research investments. It looks at ex-post studies (consumer & producer surplus; Nutritional Impact; National Income; & production function approaches) and ex-ante studies (Benefit-Cost; Simulation; and Mathematical Programming approaches).</p>
<p>Tabor S.R., Janssen, W. and Bruneau, H. 1998. <i>Financing Agricultural Research: A Sourcebook</i>. International Service for Agricultural Research (ISNAR), April 1998.. ftp://ftp.cgiar.org/isnar/publicat/pdf/fsb/fsb.pdf</p>	<p>Chapter 1 discusses the role of agricultural research; costs and returns to agricultural research; evidence and causes of underinvestment; and funding decision rules and policy performance. Chapters 2&3 discuss capital and recurrent investment policies and agricultural research.</p>
<p>Byerlee, D. and Alex G. 2002. "Designing Investments in Agricultural Research for Enhanced Poverty Impacts". SASKI Good Practice Note, The World Bank, October 2002. http://lnweb18.worldbank.org/ESSD/ardext.nsf/11ByDocName/DesigningInvestmentsinAgriculturalResearchforEnhancedPovertyImpacts/\$FILE/GPNPovertyandRD.pdf</p>	<p>Chapters 1 and 2 discuss the link between agricultural research and poverty and the related key issues. Chapter 3 discusses good practice for enhancing poverty reduction impacts of investments in research systems.</p>
<p>Meinzen-Dick, R. and Adato, M. 2002. "Assessing the impact of agricultural research on poverty using the sustainable livelihoods framework". EPTD Discussion Paper 89, IFPRI, May 2002. http://www.livelihoods.org/info/docs/IFPRI_fcnd.pdf</p>	<p>The paper provides an overview of the sustainable livelihood approach, how it can be applied to agricultural research, and describes detailed methods and results from five cases studies.</p>
<p>Norton, G.W., Coffey, J.D., Berrier Frye, E. 1984. "Estimating returns to agricultural research, extension and teaching at state level". <i>Southern Journal of Agricultural Economics</i>, July 1984. http://ageconsearch.umn.edu/bitstream/123456789/5724/1/16010121.pdf</p>	<p>The paper illustrates an approach for conducting a disaggregated state level evaluating of agricultural research, extension and teaching</p>
<p>The World Bank. 1985. "Agricultural Research and Extension: An Evaluation of the World Bank Experience". (Copies available at WBG-LIB, Ref. No. S542.3.W67 1985)</p>	<p>A review of the World Bank support for Agricultural Research and Extension in 128 projects in ten member countries over the period 1974-1980. The review attempts to establish how well the banks efforts have benefited the selected member countries overall efforts at building up their Research & Extension capabilities. It identifies country characteristics that enhanced or hindered the effectiveness of the Banks support for Research & Extension.</p>
<p>Alston, J.M., Norton, G.W. and Pardey, P.G., 1995. <i>Science under scarcity: principles and practice for agricultural research evaluation and priority setting</i>. Cornell University Press, 1995. (2 copies available at CGIAR - CGIAR Information Services and WBG-LIB - World Bank Group Library Ref. S540.E92 A58 1995).</p>	<p>Important Reference</p>
<p>Feder, G. 1985. "Role of public policy in the diffusion of improved agricultural technology". <i>AMERICAN JOURNAL OF AGRICULTURAL ECONOMICS</i> (U.S.); 67:423-28 May 1985. (1 copy available at JL - Joint Library in PERIODICAL)</p>	
<p>Feder, F., Just, R.E. and Zilberman, D. 1985. "Adoption of agricultural innovations in developing</p>	<p>The paper surveys of various studies that have attempted to theoretically or</p>

<p>countries: a survey". <i>ECONOMIC DEVELOPMENT AND CULTURAL CHANGE (U.S.)</i>; 32:255-98 January 1985. <i>(1 copy available at JL - Joint Library in PERIODICAL)</i></p>	<p>empirically explain the patterns of adoption behavior for agricultural innovations. It presents and discusses a conceptual framework for analyzing adoption and diffusion processes and surveys existing conceptual and theoretical literature regarding adoption patterns of agricultural innovations in LDCs within this framework. It also provides a critique of methodologies and models used in empirical literature and suggests new approaches and directions.</p>
<p>Jaffee, S. and Srivastava, J. 1994. "Roles of the private and public sectors in enhancing the performance of seed systems". <i>WORLD BANK RESEARCH OBSERVER (INTERNATIONAL)</i>; 9:97-117 January 1994 <i>(1 copy available at JL - Joint Library in PERIODICAL)</i></p>	<p>This article defines the scope for involving the private sector in an array of seed-related activities, identifies critical and complementary roles for the public sector, and reviews seed system development in industrial and developing countries, with a primary focus on institutional dimensions. The article advocates a phased withdrawal of the public sector from the commercial side of seed production and marketing, while recognizing a continued important role for the public sector in plant breeding research, germplasm and varietal maintenance, training, quality control, and consumer protection</p>
<p>Binswanger, H.P. 1989. "Technological priorities for farming in sub-Saharan Africa". <i>JOURNAL OF INTERNATIONAL DEVELOPMENT (U.K.)</i>; 1:46-65 January 1989. <i>(1 copy available at JL - Joint Library in PERIODICAL)</i></p>	
<p>Douglas Horton. 1986. "Assessing the impact of international agricultural research and development programs". <i>WORLD BANK ECONOMIC REVIEW (INTERNATIONAL)</i>; Vol.14, 4:453-468, April 1986 <i>(Available on World Bank JOLIS e-journals)</i></p>	<p>The author discusses problems associated with first generation impact studies that used simple econometric models, heroic assumptions and question data to estimate costs, benefits and rates of return to Agricultural R&D. The author presents a case for broader interdisciplinary approaches that are likely to produce results that are more useful to policy makers, research managers and donor organizations. His point of reference is the concern for assessing the impacts of international programs, as contrasted to national or sub-national programs.</p>
<p>Binswanger, H.P. 1985. "Evaluating research system performance and targeting research in land abundant areas of Sub-Saharan Africa". World Bank. Agriculture and Rural Development Dept. Research Unit. <i>(1 copy available at WBG-LIB - World Bank Group Library in FICHE Ref. No. HD1410.5 .D47 NO.31)</i></p>	<p>The author provides a conceptual framework to measure the benefits that should be expected from various types of agricultural innovations under different factor scarcity regimes. The framework is based on concepts used to measure the rate of technical change and also on the induced innovation literature. The later suggests that the pay offs to different types of technical change is dependent on the relative scarcities of the factors that are saved by the technical change.</p>
<p>Naseem, A., Omamo, S.W. and Spielman, D.J. 2006. "The Private Sector in Agricultural R&D: Policies and Institutions to Foster its Growth in Developing Countries". ISNAR Discussion Paper 6, August 2006. http://www.ifpri.org/divs/isnar/dp/papers/isnardp06.pdf</p>	<p>The paper discusses the determinants of private investment in R&D in developing countries, the market and institutional constraints that limit private investment growth and the incentive mechanisms that can strengthen private investment response in agricultural R&D – from both the supply and demand sides – particularly in relation to pro-poor growth.</p>
<p>Hartwich, F., Gonzalez, C. and Vieira, L. 2005. "Public-private Partnerships for Innovation-led Growth in Agrichains: A Useful Tool for Development in Latin America". ISNAR Discussion Paper</p>	<p>The paper presents the results of a study of 124 cases of private-public partnerships in agricultural innovation in nine Latin American countries. The data</p>

<p>1, September 2005. http://www.ifpri.org/divs/isnar/dp/papers/isnardp01.pdf</p>	<p>suggests that the partnership concept is used to generate agricultural innovations in many different ways, involving public research and private entities in to varying degrees and focusing on focusing on different types of agricultural products, processing, or marketing.</p>
<p>José García-Quevedo. 2004. "Do public subsidies complement business R&D: A Meta analysis of the econometric evidence". KYKLOS, Vol.57 – 2004 – Fasc.1, 87-102. http://www.blackwell-synergy.com/action/showPdf?submitPDF=Full+Text+PDF+%28285+KB%29&doi=10.1111%2Fj.0023-5962.2004.00244.x</p>	<p>The paper presents results of a meta-regression on econometric evidence regarding the relationship between public funding of R&D and private R&D expenditures.</p>
<p>Maredia, M., Byerlee, D., and Anderson, J. "Ex-post evaluation of economic impacts of agricultural research programs: a tour of good practice". A Paper presented at the workshop on "The future of impact assessment in CGIAR: Needs, constraints, and options", Standing panel on Impact Assessment (SPIA) of the Technical Advisory Committee, Rome, May, 2-3. http://impact.cgiar.org/methods/docs/maredia.pdf</p>	<p>The paper summarizes the "state of art" in ex post economic impact assessment of agricultural research with emphasis on providing a practical guide. It focuses on economic evaluation – looking at income distribution impacts (a social dimension) and economic evaluation of research impacts on natural resources (an environmental dimension).</p>
<p>Birdall, N. and Rhee, C. 1993. "Does R&D contribute to economic growth in developing countries?" The World Bank. <i>(Hard copies available in World Bank Joint Library – Ref No. HG3881.5 .W57 P63 NO.1221)</i></p>	
<p>A review of key issues and recent experiences in reforming agricultural research in Africa. ISNAR, Research Report 24. http://www.isnar.cgiar.org/publications/pdf/rr-24.pdf</p>	<p>The study reviews reforms of national Agricultural Research Systems (NARS) in sub-Saharan Africa by taking stock of the principal reform themes, namely, redefining the role of government; decentralization; and new financing mechanism. It uses seven country case studies to illustrate the NARS reform details.</p>
<p>Hartwich, F. and Springer-Heinze, A. 2004. "Enhancing the impact of agricultural research: An impact pathway perspective". <i>ISNAR Briefing paper, February 2004.</i> http://pdf.dec.org/pdf_docs/Pnacx078.pdf</p>	<p>The paper suggests an impact assessment approach that stresses the importance of planning research in order to orient it more towards those areas where it is most likely to produce the highest level of impact. It suggests that increasing the impact orientation of an organization involves not only understanding how impact is achieved but also applying simple tools to ensure that research remains directed towards the overall goal of achieving impact.</p>