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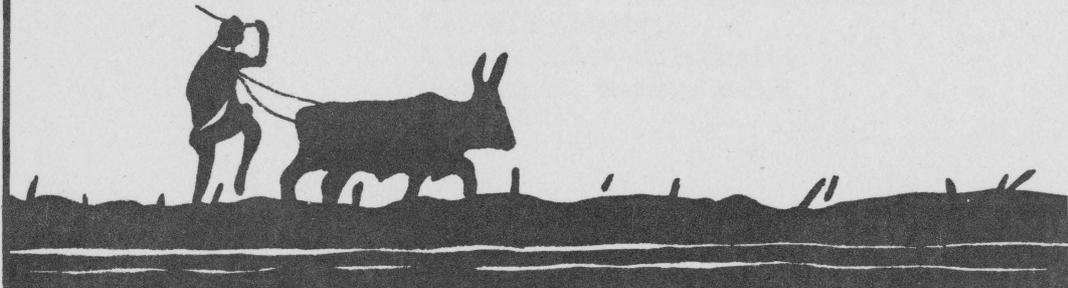
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A FARMING SYSTEMS RESEARCH BIBLIOGRAPHY  
OF KANSAS STATE UNIVERSITY'S VERTICAL  
FILE MATERIALS: SOME SELECTIONS FROM THE  
PETER E. HILDEBRAND COLLECTION, Part One.

Noel D. Young and Elsa Eaton  
Editors

Paper No. 4S1  
(Supplement One to the Revised Edition)  
Fall 1988

**FARMING SYSTEMS RESEARCH**  
**PAPER SERIES**



*Resources on developing countries*

**KANSAS STATE UNIVERSITY  
MANHATTAN, KANSAS 66506 U.S.A.**

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Resources on Developing Countries  
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Manhattan, Kansas 66506  
U.S.A.

Data base programming modifications by Dale Meyers.

## FARMING SYSTEMS RESEARCH PAPER SERIES

Kansas State University's Farming Systems Research (FSR) Paper Series is supported by the U.S. Agency for International Development Title XII Program Support Grant. The goal of the Program Support Grant is to increase the University's ability to implement Title XII agricultural and nutritional development assistance programs in developing countries. This paper series is maintained by the FSR Program Associates -- a multidisciplinary team of professors who are aiming their activities at applied research on farming from a systems perspective.

The purpose of the FSR Paper Series is to disseminate information on FSR. Publication categories include updated bibliographies from KSU's FSR data base; proceedings from KSU's FSR Systems Symposium; selected papers presented in KSU's FSR Seminar Series; and selected papers prepared by KSU's Program Associates.

Copies of these papers may be obtained from the Distribution Center, Umberger Hall, Kansas State University, Manhattan, Kansas 66506. There will be a charge for selected papers and multiple copies to help defray the cost of printing.

Vernon C. Larson  
Director  
International Agricultural Programs

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The Technical Advisory Committee's Review Team of Farming Systems Research has defined a farming system as:

"a complicated, interwoven mesh of soils, plants, animals, implements, workers, other inputs and environmental influences with the strands held and manipulated by a person called the farmer who, given his preferences and aspirations, attempts to produce output from the inputs and technology available to him. It is the farmer's unique understanding of his immediate environment, both natural and socio-economic, that results in his farming system."

It goes on to describe FSR as:

"research (including training) which: (1) is conducted with a recognition of and focusing towards the interdependencies and inter-relationships that exist among elements of the farm system, and between these elements and the farm environment; and (2) is aimed at enhancing the efficacy of farming systems through the better focusing of agricultural research so as to facilitate the generation and testing of improved technology."

"The major activities involved in FSR are:

- (a) The collection and analysis of base data;
- (b) The study of existing farming systems;
- (c) The design of new farming systems;
- (d) Farm systems experimentation; and
- (e) The evaluation and monitoring of new farming systems."<sup>1</sup>

### SUPPLEMENT ONE ...

lists FSR vertical file material and selected publications with Library of Congress classification numbers donated by Peter E. Hildebrand, from his collection at the University of Florida, Gainesville. These items can be found within KSU's Farrell Library. The vertical file material includes unpublished papers, drafts, house organs and other non-conventional, or fugitive literature. Keyword, title, and primary author indices are provided. The standard for keywording is an "enhanced" CAB Thesaurus.

<sup>1</sup>Farming Systems Research at the International Agricultural Research Centers, Washington, World Bank for TAC Secretariat/FAO, 1978, page 8.

Over eight hundred new items have been added. Duplicate citations (listed in the previous FSR Bibliography, No. 4, Revised) amount to less than five per cent of the new supplement. They have been retained in order to maintain the integrity of the Hildebrand Collection. The original classification scheme developed and assigned by Peter Hildebrand, has been placed at the end of the keyword section. This will allow searching from an additional subject perspective.

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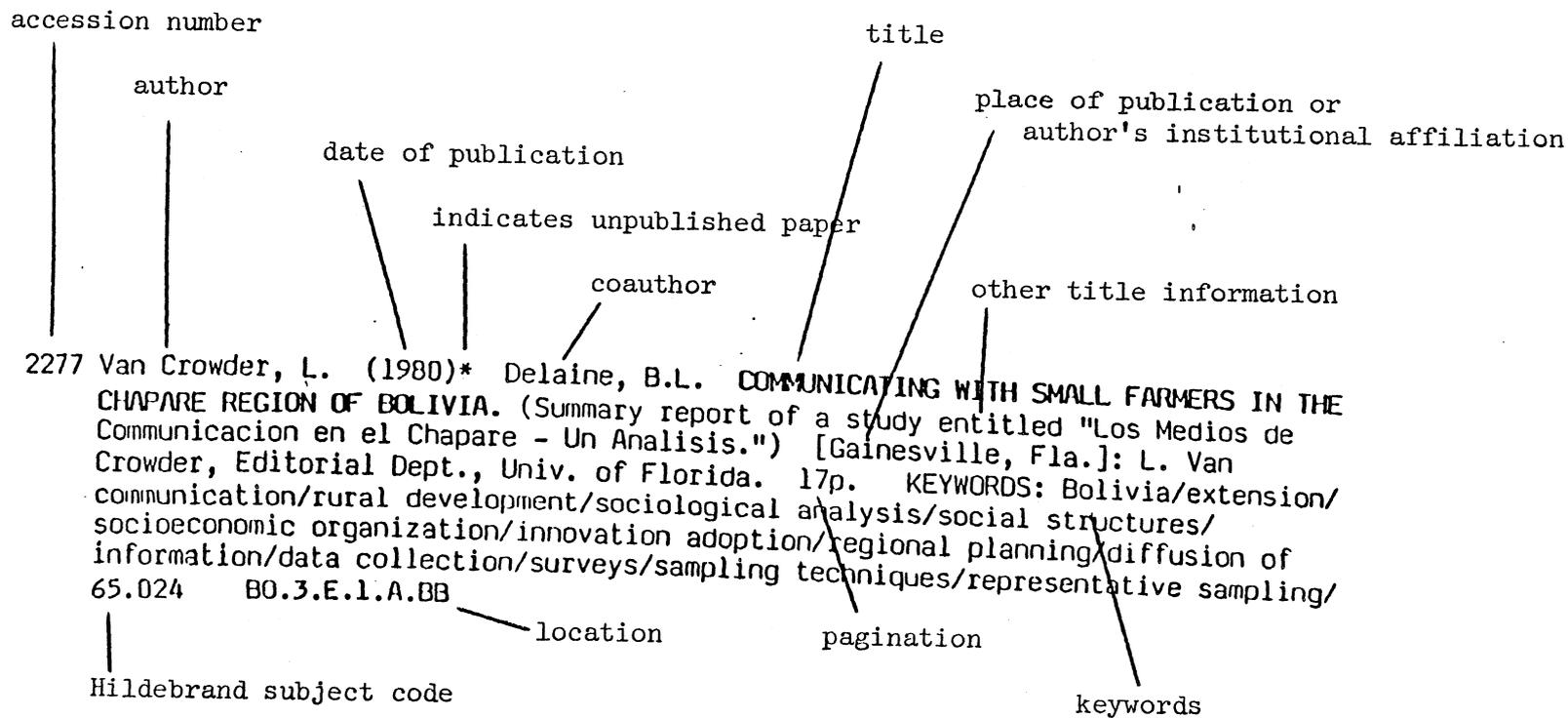
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We welcome suggestions and donations of new materials for the Farming Systems Collection.

Noel D. Young  
Librarian  
Resources for Developing Countries

PARTS OF THE CITATION



## HILDEBRAND SUBJECT CODE LIST

01.....Evaluation	51.....Organic Farming
02.....Methodology - General	52.....Integrated Pest Management
03.....Rural Poverty	53.....Weeds
04.....Cropping Systems - General	54.....No Tillage/Minimum Tillage
05.....Cropping Systems - Guatemala	55.....Farm Records
06.....TI-59	56.....Women in Agriculture
07.....Apple	57.....Agronomy - General
08.....Minicomputers - General	58.....Food Policy
09.....Multicultivos - El Salvador	59.....Infrastructure
10.....Small Farmers	60.....Research Centers
11.....Grain Technology - Appropriate	61.....Bibliographies
12.....Rural Home, Family	62.....Project Proposals
13.....FSIP	63.....Risk
14.....FSR/E - USAID Project	64.....
15.....Farming Systems - General	65.....Extension
16.....FSR/E Methodology	66.....Anthropology
17.....FSR/E Title XII	67.....Energy
18.....FSR/E Florida	68.....Cooperatives
19.....FSR/E Administration - Policy	69.....Ecology
20.....Livestock - General	70.....Culture and Agriculture
21.....Livestock - Small Farms	71.....Catalogues
22.....Sondeos	72.....Miscellaneous
23.....Livestock - Methodology	73.....Africa
24.....Rural Development	74.....
25.....Socioeconomics - General	75.....West Pakistan
26.....Socioeconomics - ICTA	76.....
27.....ICTA - Annual Reports	77.....Rockefeller Foundation
28.....	78.....Rockefeller Foundation
29.....	79.....Annual Reports - General
30.....ICTA General	80.....Farm Management
31.....Post Harvest	81.....Learning Curve
32.....Credit	82.....Maps
33.....Seed	83.....Meteorology
34.....Crop Production Costs	84.....Irrigation
35.....Crops - General	85.....IADS - General
36.....Potatoes	86.....INIAP - General
37.....Corn	87.....IDIAP - General
38.....Sorghum	88.....ICA - General
38a.....Forages	89.....ICA - Agricultural Economics
39.....Wheat	90.....ICA - FSR/E
40.....Vegetables	91.....CENTA - El Salvador
41.....Rice	92.....Data General
42.....Pigeon Pea	93.....Mechanization
43.....Cassava	94.....Inputs
44.....Beans, Soybeans	95.....Training/Courses in FSR/E
45.....Peanut	96.....
46.....Fruit	97.....
47.....Forestry	98.....Vertebrate Pests
48.....Crop Methodology	99.....Projects Proposals
49.....SER Field Books	100.....Food and Resource Economics
50.....Soils	105.....Marketing

## ABBREVIATIONS, ACRONYMS AND INITIALISMS

AAAS	American Association for the Advancement of Science
ACDI	Agricultural Cooperative Development International
ACIAR	Australian Centre for International Agricultural Research
AD	Agricultural Administration
ADB	Asian Development Bank
ADC	Agricultural Development Council
ADNP	Agricultural Development Ngamiland Project
AFTRCW/UNECA	African Training and Research Centre for Women/United Nations Economic Commission for Africa
AIA	Agricultor-Investigacion-Agricultor
AICRPDA	All India Coordinated Research Project for Dryland Agriculture
AID	Agency for International Development
AID/S&T	Agency for International Development/Bureau for Science and Technology
ALDEP	Arable Lands Development Programme
ASA	American Society of Agronomy
ASAE	American Society of Agricultural Engineers
ASHA/AHS/ AABGA	?/American Horticulture Society/American Association of Botanical Gardens and Arboreta
ASPAC/FFTC	Asian and Pacific Council/Food and Fertilizer Technology Center
ASTA	American Seed Trade Association
ATIP	Agricultural Technology Improvement Project (Botswana)
AVRDC	Asian Vegetable Research and Development Center
BAEP	Bureau of Economic Analysis and Planning
BARC	Bangladesh Agricultural Research Council
BDPA	Bureau pour le developpement de la production agricole
BIFAD	Board for International Food and Agricultural Development
CARDI	Caribbean Agricultural Research and Development Institute
CATIE	Centro Agronomico Tropical de Investigacion y Ensenanza
CATIE/ROCAP	Centro Agronomico Tropical de Investigacion y Ensananza/ Regional Office for Central American Programs
CENDA	Centro de Desarrollo Agropecuario, Zona Norte
CDR	Centre for Development Research
CENDERCO	Centro para el Desarrollo Rural y Cooperativo
CENDHRA	Centre for the Development of Human Rersources in Rural Asia (San Juan, Rizal, Philippines)
CENTA	Centro Nacional de Tecnologia Agropecuaria
CENTA/BID	Centro Nacional de Tecnologia Agropecuaria/Banco Interamericano de Desarrollo (El Salvador)
CEPAL	Economic Commission for Latin America
CES	Cooperative Extension Service (U.S.)
CGIAR	Consultative Group on International Agricultural Research
CIARLA	Centro de Investigaciones Agropecuarias Region Los Andes
CIAT	Centro Internacional de Agricultura Tropical
C.I.A.T.	Centro de Investigacion Agricola Tropical (Bolivia)
CID	Consortium for International Development
CILSS	Comite permanent interetats de lutte contre la secheresse dans le Sahel=Permanent Interstate Committee for Drought Control in the Sahel
CIMMYT	Centro Internacional de Mejoramiento de Maiz y Trigo

CIP	Centro Internacional de la Papa
CIPEA	Centre international pour l'elevage en Afrique
comp., comps.	compiler, compilers
CLSU	Central Luzon State University
CRIA	Central Research Institute for Agriculture, Indonesia
CRDI	Centre de recherche pour le developpement international
CRSP	Collaborative Research Support Project
DAI	Development Alternatives, Inc.
Dept.	Department
ed., eds.	editor, editors
EFSaip	Evaluation of Farming Systems & Agricultural Implements Project, Sebele
et al.	(used when there are <u>more</u> than 3 authors)
EMBRAPA	Empressa Brasileira de Pesquisa Agropecuaria
FAO	Food and Agriculture Organization of the United Nations
FAO/SIDA	Food and Agriculture Organization of the United Nations/ Swedish International Development Agency
FSR	farming systems research
FSR/D	Farming Systems Research/Development
FSR/E	Farming Systems Research/Extension
FSSP	Farming Systems Support Project (University of Florida, Gainesville)
FSSP/GARD	Farming Systems Support Project (University of Florida, Gainesville)/ Gambia Agricultural Research and Diversification (?)/Development(?) (Project)
FONAIAP	Fondo Nacional de Investigaciones Agropecuarias
FY	fiscal year
GARD	Gambia Agricultural Research and Diversification (?)/Development(?) (Project)
GERDAT	Groupement d'etudes et de recherches pour le developpement de l'agronomie tropical
HYV	high yielding varieties
IAAE	International Association of Agricultural Economists
IADS	International Agricultural Development Service
IAF	Inter-American Foundation
IAFP	International Agricultural and Food Program, Cook College, Rutgers University
IARC	International Agricultural Research Centers
IARI	International Agricultural Research Institute
IBPGR	International Board for Plant Genetic Resources
ICA	Instituto Colombiano Agropecuario
ICAR	Indian Council of Agricultural Research
ICARDA	International Center for Agricultural Research in the Dry Areas
ICLARM	International Centre for Living Aquatic Resources Management
ICMRD	International Center for Marine Resource Development
ICRAF	International Center for Research in Agroforestry
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICRW	International Center for Research on Women
ICTA	Instituto de Ciencia y Tecnologia Agrícolas=Institute of Agricultural Science and Technology of Guatemala
IDB	Inter-American Development Bank=Banco Interamericano de Desarrollo (BID)
IDIAP	Instituto de Investigaciones Agropecuarias de Panama

IDRC	International Development Research Centre
IDS	Institute for Development Studies
IE&R, IPIA	International Education and Research, International Programs in Agriculture, Purdue University
IFAS	Institute of Food and Agricultural Sciences
IFDC/IRA	International Fertilizer Development Center/Institut de recherche agronomique
IFOAM	International Federation of Organic Agricultural Movemements
IFPP	Integrated Farming Pilot Project, Pelotshetlha
IFPRI	International Food Policy Research Institute
IICA	Instituto Interamericano de Ciencias Agricolas= Interamerican Institute for Co-operation on Agriculture
IICA/CIDIA	Instituto Interamericano de Ciencias Agricolas de la Organizacion de Estados Americanos/Centro Interamericano de Documentacion y Information Agricola
IICA/INRA	Inter-American Institutẽ for Cooperation on Agriculture/ Institut national de recherches agronomiques
IIRR	International Institute of Rural Reconstruction
IITA	International Institute of Tropical Agriculture
IITA/USAID/ MIDAS	International Institute of Tropical Agriculture/United States Agency for International Development/Managed Inputs and Delivery of Agricultural Services
ILCA	International Livestock Center for Africa
ILO	International Labour Organisation
INARC	International Agricultural Research Centers
INCAP	Instituto de Nutricion de Centroamerica y Panama
INIA	Instituto Nacional de Investigaciones Agrarias
INIAP	Instituto Nacional de Investigacion Agropecuaria
INRA	Institut national de la recherche agricole
INRAN	Institut national de recherches agronomiques des Niger
Inst.	Institute
INTA	Instituto Nacional de Tecnologia
INTERPAKS	International Program for Agricultural Knowledge Systems, Univ. of Illinois, Urbana-Champaign
INTSORMIL	International Sorghum/Millet
IPIA	International Programs in Agriculture, Purdue University
IRAEN	International Rice Agro-Economic Network
IRAT	Institut des recherches agronomiques tropicales et des cultures vivrieres
IRC	International Research Centers
IRCT/Mali	Institut de recherche du coton et des textiles exotiques (Mali)
IRRI	International Rice Research Institute
ISA	Investigacion de Sistemas Agropecuarios
ISS	Institute of Social Studies
ISNAR	International Service for National Agricultural Research
IUFS&T	International Union of Food Science & Technology, Goteborg, Sweden
IUNS	International Union of Nutritional Sciences, Zurich, Switzerland
KKU	Khon Kaen University, Thailand
KKU/FCSP	Khon Kaen University/Ford Cropping Systems Project
KSU	Kansas State University (Manhattan, Kansas)
LASA	Lesotho Agricultural Sector Analysis Project

MAFCA Ministry of Agriculture, Food and Consumer Affairs,  
(Barbados)

MARC Monitoring and Assessment Research Centre

MARIF Malang Research Institute for Food Crops

MDP Molapo Development Project, Maun

MF microfiche

MIAC MidAmerica International Agricultural Consortium

MP miscellaneous papers

MSTT Modular System for Technology Transference

MSU Michigan State University (East Lansing, Michigan)

n.d. no date of publication

NADP Ngamiland and Agricultural Development Project, Gomare

NGA National Grains Authority (Quezon City, Philippines)

NOAA National Oceanic and Atmospheric Administration

NSW/ACT New South Wales/Australian Capital Territory

OAS Organization of American States

OAU Organization of African Unity

OAU/STRC Organization of African Unity/Scientific Technical Research Commission

ODA Overseas Development Administration

ODI Overseas Development Institute

OECD Organization for Economic Cooperation and Development

OLC Overseas Liaison Committee (American Council on Education)

ORD Organisme regional de developpement

ORSTOM Office de la recherche scientifique et technique outre-mer

PARC Pakistan Agricultural Research Council

PASITAM Program of Advanced Studies in Institution Building and Technical Assistance Methodology

PC paper copy

PCARR Philippine Council for Agriculture and Resources Research

PCARRD Philippine Council for Agriculture and Resources Research and Development

PCCMCA Programa Cooperativo Centroamericano para el Mejoramiento de Cultivos Alimenticios

PGRCE Plant Genetic Resource Center for Ethiopia

PN publication number

PR progress report

PROTAAL Proyecto Cooperative de Investigacion sobre Tecnologia Agropecuaria en America Latina

PSCPA Proyecto de Sistemas de Cultivo para Pequeños Agricultores del Istmo Centroamericano

PTPA Proyecto de Tecnologia para Pequeños Agricultores

RD reporting documents

ROC Republic of China

RPO ? (World Bank)/International Finance Corporation

RRFH regular research field hearings

RTN Research and Training Network

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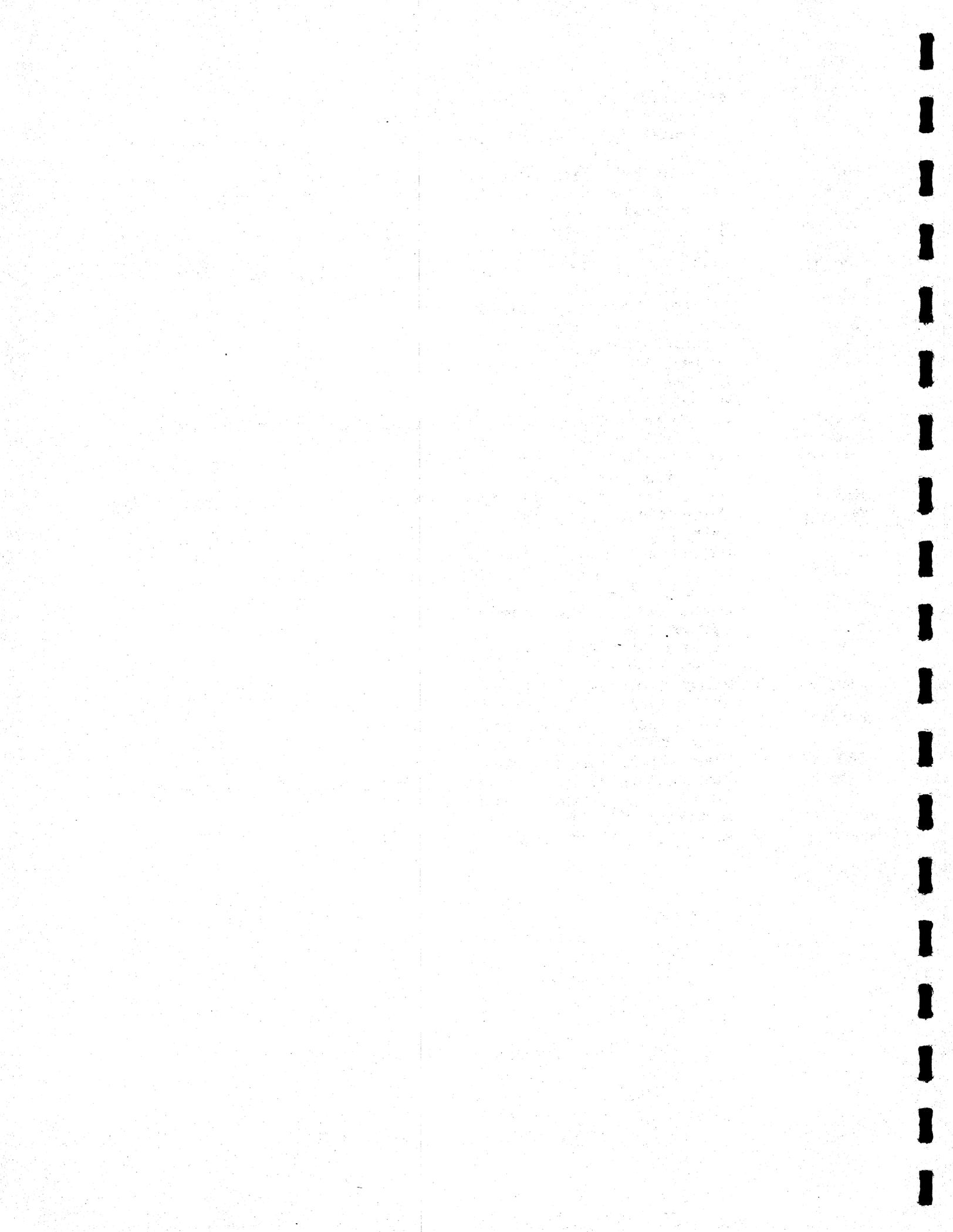
SACUC Swaziland Agricultural College and University Centre

SADCC Southern African Development Coordination Committee

SAFGRAD Semi-Arid Food Grains Research and Development Program

SAREC Swedish Agency for Research Cooperation with Developing Countries

SAT	semi-arid tropics
SEADAG	Southeast Asian Development Advisory Group
SEARCA	Southeast Asian Regional Center for Graduate Study and Research in Agriculture
SERA	Servicio de Invertigaciones Agricolas
SR-CRSP	Small Ruminant-Collaborative Research Support Program
SSIP	? (Germany)
SSRC/SERP	Social Sciences Research Centre/Socio-Economic Research Project
S&T/AGR/AP	Bureau for Science and Technology/Office of Agriculture/?
STRC/OAU	Scientific Technical Research Commission/Organization of African Unity
TES	typical (Developing Country) extension systems
TFNC	Tanzania Food and Nutrition Centre
TIF	Technological Improvement File
T&V	training and visit system
Trans.	translation
U.	University
UN	United Nations
UN/ESCAP	United Nations/Economic and Social Commission for Asia and the Pacific
UNAZA	? (Zaire)
UNDP/FAO	United Nations Development Programme/Food and Agriculture Organization of the United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNU	United Nations University, Tokyo
US	United States
USAID	United States Agency for International Development
USAID/ORD	United States Agency for International Development/ ? (Guatemala)
USDA	United States Department of Agriculture
var.	various (paging)
VITA	Volunteers in Technical Assistance
VLS	village level studies
vol., vols.	volume, volumes
WA	West Africa
WARDA	West Africa Rice Development Association
WHO	World Health Organization
WIADP	Women in Agriculture (Development Project)
Winrock	Winrock International Institute for Agricultural Development
WIP	Winrock International publication
WP	working papers
WSARP	Western Sudan Agricultural Research Project



## SUBJECT HEADINGS AND TABLE OF CONTENTS

- I. FARMING SYSTEMS: DESCRIPTIVE (General and Inclusive)
  - A. Cropping Patterns
    - 1. Polyculture
    - 2. Double or triple crops
    - 3. Fallowing and cover cropping, tillage systems
    - 4. Crop rotations
    - 5. Shifting cultivation
    - 6. Plantations and agro-silviculture
  - B. Animal Systems
  - C. Mixed Systems (animals and plants)
  - D. Aquaculture and Agriculture
  
- II. PHYSICAL AND BIOLOGICAL FACTORS
  - A. Physical Factors
    - 1. Land, soils and fertilizer
    - 2. Agroclimatology
    - 3. Water and water management
  - B. Biological Factors
    - 1. Crops
    - 2. Crop protection
      - a. Weeds
      - b. Animal kingdom
      - c. Fungi and bacteria
    - 3. Animals
      - a. Animal parasites
  
- III. HUMAN ELEMENT: EXOGENOUS FACTORS
  - A. Social Organization and Community Structure
  - B. Physical Environment (built environment)
  - C. Community Norms and Beliefs
  - D. Population, Nutrition and Health
  - E. External Institutions
    - 1. Infrastructure, support systems
      - a. Input
        - aa. Input distribution
        - bb. Extension
        - cc. Credit
      - b. Output
        - aa. Marketing
        - bb. Post harvest storage
        - cc. Processing
    - 2. Policies and structural reform programs
  - F. Technological and Mechanical Factors
    - 1. Mechanization (animal traction falls in Mixed Systems)
    - 2. Energy
    - 3. Technology transfer
    - 4. Appropriate technology
    - 5. Recommended technology

SUBJECT HEADINGS AND TABLE OF CONTENTS (con't)

- IV. HUMAN ELEMENT: ENDOGENOUS FACTORS (Household)
  - A. Goals and Risks
  - B. Economic Inputs
    - 1. Land
    - 2. Labor management
    - 3. Capital, finance
  - C. Economic Output
    - 1. Income
    - 2. Food
  
- V. FARMING SYSTEMS RESEARCH METHODOLOGY
  - A. Survey Techniques (descriptive and diagnostic methods)
  - B. Design of Improved Technology
  - C. Testing
  - D. FSR Methodology Extension and Transfer
  - E. Systems Analysis
  
- VI. INSTITUTIONAL FACTORS IN IMPLEMENTATION OF FARMING SYSTEMS RESEARCH

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SELECTIONS FROM THE PETER E. HILDEBRAND COLLECTION, Part One

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## KEYWORD INDEX

- administration policy
  - .... 2610
- adult education
  - .... 2264
- advisory officers
  - .... 2294, 2295
- aerial methods
  - .... 2547
- aerial surveys
  - .... 2547
- Africa
  - .... 1978, 2045, 2052, 2064, 2066, 2071, 2076, 2177, 2180, 2185, 2188, 2232, 2248, 2298, 2315, 2319, 2356, 2369, 2448, 2464, 2513, 2543, 2599
- Africa south of Sahara
  - .... 2076 2298, 2299, 2314, 2369,
- agrarian reform
  - .... 2201, 2252, 2260, 2260, 2371
- agribusiness
  - .... 2184
- agricultural planning
  - .... 2386
- agricultural research
  - .... 2235, 2377
- agricultural
  - .... 1973
- agricultural analysis
  - .... 2502
- agricultural chemicals
  - .... 2082, 2089, 2629
- agricultural credit
  - .... 2282
- agricultural development
  - .... 1953, 1969, 1994, 1998, 1999, 2007, 2076, 2095, 2103, 2172, 2174, 2177, 2178, 2181, 2183, 2184, 2188, 2190, 2193, 2201, 2202, 2204, 2209, 2218, 2212, 2222, 2232, 2233, 2245, 2248, 2255, 2256, 2260, 2260, 2263, 2265, 2266, 2267, 2268, 2271, 2272, 2279, 2281, 2298, 2299, 2309, 2310, 2316, 2318, 2319, 2321, 2326, 2331, 2332, 2339, 2348, 2356, 2367, 2433, 2458, 2459, 2466, 2468, 2479, 2484, 2487, 2500, 2505, 2513, 2517, 2520, 2526, 2582, 2590, 2611, 2613, 2648, 2653, 2657, 2660, 2662
- agricultural economics
  - .... 1955, 1964, 2182, 2207, 2222, 2226, 2236, 2239, 2269, 2338, 2395, 2442, 2449, 2472, 2649
- agricultural economists
  - .... 2249, 2269
- agricultural education
  - .... 2174, 2222, 2640
- agricultural engineering
  - .... 2347, 2347, 2348
- agricultural financial policy
  - .... 2282
- agricultural households
  - .... 1973, 2280, 2379, 2435, 2445
- agricultural insurance
  - .... 2311
- agricultural labour
  - .... 1964, 2328
- agricultural manpower
  - .... 1965, 2086
- agricultural planning
  - .... 2267
- agricultural policies
  - .... 2190
- agricultural policy
  - .... 2052, 2079, 2082, 2187, 2207, 2237, 2260, 2263, 2293, 2298, 2300, 2308, 2317, 2318, 2321, 2326, 2331, 2337, 2348, 2436, 2466, 2498, 2578
- agricultural prices
  - .... 2187, 2431
- agricultural production
  - .... 1952, 1971, 1987, 2040, 2049, 2066, 2069, 2079, 2082, 2103, 2159, 2185, 2222, 2233, 2234, 2262, 2274, 2301, 2302, 2303, 2304, 2317, 2323, 2326, 2329, 2333, 2352, 2498, 2508, 2519, 2520, 2525, 2555, 2575, 2618
- agricultural productivity
  - .... 2352, 2377, 2578, 2656
- agricultural products
  - .... 2174, 2331
- agricultural research
  - .... 1956, 1984, 1985, 1987, 2082, 2110, 2126, 2131, 2134, 2135, 2149, 2159, 2174, 2183, 2197, 2204, 2222, 2230, 2233, 2249, 2255, 2263, 2285, 2301, 2302, 2316, 2322, 2323, 2324, 2328, 2333, 2343, 2352, 2354, 2355, 2365, 2450, 2453, 2454, 2456, 2464, 2484, 2489, 2493, 2499, 2508, 2526, 2541, 2542, 2543, 2544, 2561, 2569, 2572,

agricultural research (con't)  
     .... 2578, 2590, 2593, 2613, 2614, 2616,  
         2620, 2626, 2632, 2633, 2636, 2640,  
         2641, 2642, 2644, 2651, 2652, 2654,  
         2656, 2657, 2658, 2659, 2664, 2665,  
         2460  
 agricultural sciences  
     .... 2222  
 agricultural situation  
     .... 1951, 2019, 2234, 2403, 2427, 2487,  
         2525  
 agricultural structure  
     .... 2190, 2201, 2229, 2260, 2308, 2394,  
         2629  
 agricultural systems  
     .... 1986, 2483  
 agriculture  
     .... 1954, 1969, 1978, 1979, 2203, 2227,  
         2228, 2248, 2349, 2505  
 agriculture analysis  
     .... 2595  
 agriculture economics  
     .... 2273  
 agricultural development  
     .... 2179, 2186, 2352  
 agroclimatic regions  
     .... 1964, 1973, 2016, 2280, 2447  
 agroclimatology  
     .... 2430, 2435, 2600  
 agroecosystems  
     .... 1989, 2003, 2012, 2013, 2159, 2189,  
         2305, 2483, 2489, 2489, 2490, 2498,  
         2610, 2626, 2627  
 agroforestry  
     .... 2539  
 agroindustrial relations  
     .... 2629  
 agroindustrial sector  
     .... 2629  
 agronomic characteristics  
     .... 2258  
 agronomy  
     .... 2365, 2407, 2472  
 AIA  
     .... 2617  
 AICRPDA  
     .... 2595  
 AID  
     .... 2340, 2340, 2352, 2508, 2632, 2637,  
         2653, 2656  
 alfalfa  
     .... 2061  
 alfisols  
     .... 2080, 2116  
 algae  
     .... 2083, 2165  
 Allegheny Highlands Project  
     .... 2473  
 alpaca  
     .... 2063  
 alternative farming  
     .... 2005, 2034, 2082, 2274  
 Amazon region  
     .... 1969, 2057, 2186, 2212, 2213  
 analysis  
     .... 1990, 2021, 2094, 2136, 2151, 2219,  
         2250, 2250, 2339, 2380, 2385, 2458,  
         2486, 2490, 2491, 2501, 2510, 2511,  
         2525, 2609, 2623  
 analysis of variance  
     .... 2455  
 analytical methods  
     .... 2525, 2664  
 ancillary enterprises  
     .... 2296  
 Andean Group  
     .... 1979, 2227, 2228, 2254, 2363, 2576,  
         2589, 2628  
 animal feeding  
     .... 2042, 2045, 2051, 2065  
 animal health  
     .... 2231  
 animal husbandry  
     .... 1968, 1975, 2046, 2074  
 animal manures  
     .... 2061  
 animal nutrition  
     .... 2042, 2045, 2167  
 animal power  
     .... 1956, 2003, 2040, 2045, 2053, 2066,  
         2100  
 animal production  
     .... 1953, 2041, 2055, 2061, 2062, 2627  
 animal products  
     .... 2074  
 animal protein  
     .... 2048  
 animal proteins  
     .... 2054, 2065  
 animal research  
     .... 2583  
 animal traction  
     .... 2055, 2072, 2506  
 animals  
     .... 2048, 2048, 2054, 2074, 2167

annual reports  
     .... 1956, 2126, 2137, 2242, 2476, 2503  
 anthropology  
     .... 1960, 2189, 2195, 2203, 2236, 2304,  
         2456, 2474, 2479, 2526, 2532, 2590,  
         2661  
 anthropometric dimensions  
     .... 2220  
 applications  
     .... 2151  
 applied research  
     .... 2180, 2180, 2450, 2473, 2652  
 apprenticeship  
     .... 2315  
 appropriate technology  
     .... 1963, 1968, 1975, 2002, 2034, 2040,  
         2056, 2061, 2065, 2066, 2070, 2087,  
         2100, 2131, 2159, 2188, 2195, 2197,  
         2204, 2215, 2255, 2272, 2323, 2338,  
         2339, 2342, 2343, 2347, 2347, 2350,  
         2354, 2365, 2366, 2367, 2369, 2370,  
         2371, 2372, 2373, 2374, 2375, 2376,  
         2378, 2379, 2427, 2435, 2468, 2475,  
         2479, 2480, 2481, 2483, 2493, 2494,  
         2498, 2511, 2520, 2523, 2524, 2531,  
         2557, 2572, 2578, 2584, 2587, 2619,  
         2620, 2632, 2636, 2656, 2664, 2665  
 approval schemes  
     .... 2244  
 aquaculture  
     .... 2370  
 arable land  
     .... 2484  
 Arachis hypogaea  
     .... 2025, 2150, 2231  
 Argentina  
     .... 2318  
 arid lands  
     .... 2662  
 arid regions  
     .... 2308, 2349, 2538, 2574  
 arid zones  
     .... 2574  
 artificial insemination  
     .... 2231  
 Asia  
     .... 1985, 2003, 2008, 2023, 2071, 2163,  
         2164, 2180, 2204, 2237, 2247, 2304,  
         2314, 2340, 2340, 2346, 2347, 2347,  
         2358, 2543, 2593, 2605, 2608  
 aspect  
     .... 2425  
 assets  
     .... 1973  
 attitudes to work  
     .... 5460  
 bacterial diseases  
     .... 2126  
 bacterioses  
     .... 2124, 2125  
 bananas  
     .... 1953, 1965  
 Bangladesh  
     .... 1980, 2083, 2247, 2256, 2323, 2339,  
         2346, 2545  
 Bangladesh Agricultural Research Institut  
     .... 2323  
 bargaining models  
     .... 2448  
 barley  
     .... 2073, 2077, 2353  
 Bas Boen Project  
     .... 2265  
 baseline data  
     .... 2515, 2540, 2551, 2557, 2559, 2569,  
         2597, 2601, 2602, 2604, 2615  
 beans  
     .... 1951, 1953, 1958, 1968, 1968, 1975,  
         1981, 1986, 1993, 1996, 1997, 2001,  
         2006, 2012, 2013, 2014, 2036, 2081,  
         2084, 2124, 2125, 2133, 2138, 2154,  
         2242, 2250, 2250, 2265, 2352, 2390,  
         2391, 2393, 2397, 2398, 2399, 2400,  
         2401, 2403, 2404, 2405, 2417, 2419,  
         2421, 2422, 2425, 2426, 2427, 2429,  
         2444, 2470, 2508, 2511, 2522, 2534,  
         2563, 2592, 2632, 2656, 2667  
 beans/sheep  
     .... 2061  
 beef  
     .... 2257  
 beef cattle  
     .... 2042, 2167, 2168, 2231  
 beef production  
     .... 2257  
 beers  
     .... 2185  
 behaviour  
     .... 2379  
 bibliographies  
     .... 1954, 1978, 1979, 1982, 2055, 2063,  
         2138, 2176, 2227, 2228, 2245, 2281,  
         2282, 2306, 2449  
 BIFAD  
     .... 2462, 2637, 2660

bilingual education  
     .... 2162  
 biological control  
     .... 2124, 2125, 2155, 2157, 2158, 2160,  
         2161  
 biological value  
     .... 2133, 2141  
 biology  
     .... 2124, 2125  
 biotechnology  
     .... 2127  
 body measurements  
     .... 2220  
 boiling  
     .... 2136  
 Bolivia  
     .... 1952, 1965, 2180, 2254, 2277, 2363,  
         2507, 2567, 2589, 2628  
 books  
     .... 2407  
 Botswana  
     .... 2068, 2180  
 bovidae  
     .... 1951, 1972, 2041  
 Brazil  
     .... 2102, 2179, 2212, 2213, 2214, 2662  
 breeding  
     .... 2133, 2145, 2224, 2308  
 breeding programmes  
     .... 2047  
 brewing  
     .... 2185  
 Brown Swiss  
     .... 2047  
 budgets  
     .... 2250, 2250  
 buffalo  
     .... 2063, 2662  
 buffalo feeding  
     .... 2065  
 bug juice method  
     .... 2157, 2158  
 building technology  
     .... 2001, 2342, 2587  
 bunning  
     .... 2179  
 Burkina Faso  
     .... 2195  
 byproducts  
     .... 2055, 2065  
 cabbage  
     .... 1996  
  
 Cadu project  
     .... 2543  
 Caisan programma  
     .... 2654  
 California  
     .... 2209  
 camals  
     .... 2063  
 Cameroon  
     .... 2180, 2448  
 cane suger  
     .... 2265  
 capital  
     .... 1956, 1961, 1965, 1968, 1975, 2425  
 capital productivity  
     .... 2425  
 capsicum  
     .... 2067  
 Caqueza Project  
     .... 2378, 2543, 2667  
 carbohydrates  
     .... 2134  
 CARDI  
     .... 2062, 2086  
 career development  
     .... 2643  
 Caribbean  
     .... 2133, 2180, 2386  
 carrots  
     .... 2086  
 case studies  
     .... 1953, 1983, 1984, 1985, 2021, 2052,  
         2075, 2089, 2089, 2090, 2112, 2112,  
         2135, 2136, 2179, 2186, 2187, 2191,  
         2196, 2197, 2199, 2201, 2211, 2212,  
         2215, 2216, 2217, 2223, 2230, 2234,  
         2236, 2247, 2250, 2250, 2251, 2266,  
         2286, 2303, 2315, 2318, 2340, 2340,  
         2346, 2360, 2381, 2383, 2384, 2389,  
         2394, 2408, 2415, 2423, 2428, 2429,  
         2441, 2456, 2459, 2463, 2466, 2473,  
         2474, 2479, 2480, 2486, 2490, 2507,  
         2525, 2526, 2530, 2533, 2540, 2543,  
         2545, 2547, 2558, 2559, 2563, 2565,  
         2569, 2586, 2590, 2595, 2617, 2623,  
         2626, 2629, 2635, 2638, 2640, 2662  
 cash crops  
     .... 1965, 1970, 1971, 2448, 2498, 2502  
 cassava  
     .... 2004, 2004, 2012, 2013, 2014, 2103,  
         2223, 2354, 2356, 2534, 2546  
 caste  
     .... 1973

castor  
     .... 1973  
 CATIE  
     .... 1982, 2014, 2041, 2062, 2075, 2089,  
         2127, 2485, 2606, 2616  
 cattle  
     .... 1951, 1953, 1965, 1968, 1972, 1975,  
         2049, 2052, 2056, 2067, 2186, 2362,  
         2393, 2563, 2662  
 cattle farming  
     .... 2043  
 cattle fattening  
     .... 2051, 2166  
 cattle production  
     .... 2075, 2385  
 censuses  
     .... 1957, 1962  
 CENTA  
     .... 2250, 2250  
 Central Africa  
     .... 2558, 2657  
 Central America  
     .... 2039, 2071  
 Central America production  
     .... 2385  
 cereal products  
     .... 1956, 2185  
 cereals  
     .... 2127, 2146, 2177, 2185, 2311, 2314,  
         2338, 2588  
 CGIAR  
     .... 2126, 2127, 2324, 2454  
 Chad  
     .... 2177  
 change  
     .... 2500  
 changes  
     .... 2216, 2402, 2469, 2546  
 chemical control  
     ... 2089, 2123  
 chemical vs. cultural weed control  
     .... 2021  
 chicken corn  
     .... 2506  
 chickens  
     .... 1952, 1968, 1975  
 chickpeas  
     .... 2016, 2153  
 chilies  
     .... 2001  
 CIAT  
     .... 1953, 1954, 2124, 2125, 2154, 2167,  
         2324, 2352, 2431, 2534, 2592, 2663

CIMMYT  
     .... 2045, 2087, 2127, 2137, 2188, 2226,  
         2249, 2256, 2324, 2352, 2353, 2407,  
         2433, 2455, 2463, 2464, 2466, 2468,  
         2479, 2506, 2541, 2542, 2544, 2555,  
         2557, 2587, 2612, 2621, 2633, 2636,  
         2640, 2652, 2663, 2665  
 CIP  
     .... 1979, 2126, 2127, 2128, 2134, 2135,  
         2141, 2227, 2228, 2274, 2324, 2355,  
         2456, 2523, 2526, 2540, 2590, 2664  
 class conflict  
     .... 2198  
 classification  
     .... 2208, 2505, 2512  
 cleaning  
     .... 2425  
 climactic factors  
     .... 1983, 2425  
 climate  
     .... 2019, 2068, 2097, 2499  
 climate factors  
     .... 1975  
 climate requirements  
     .... 2124  
 climatic factors  
     .... 1984, 2081, 2098, 2099, 2353, 2385,  
         2398, 2403, 2421, 2428, 2502, 2506,  
         2509, 2530  
 climatic requirements  
     .... 2125  
 climbing beans  
     .... 2124  
 coca  
     .... 2101  
 cocoa  
     .... 2181  
 coffee  
     .... 1968, 1968, 1975  
 coffee production  
     .... 2384  
 collective farming  
     .... 2265  
 Colombia  
     .... 1953, 2004, 2024, 2154, 2167, 2172,  
         2196, 2239, 2254, 2359, 2363, 2378,  
         2431, 2449, 2534, 2567, 2576, 2589,  
         2628, 2649, 2667  
 colonialism  
     .... 2298, 2310  
 Comilla project  
     .... 2543  
 commercial credit  
     .... 2280

commercial farming  
.... 2421, 2502  
commodities  
.... 2174, 2202, 2331  
commodity markets  
.... 2174, 2258  
  
communication  
.... 2103, 2126, 2260, 2263, 2267, 2268,  
2270, 2271, 2272, 2277, 2288, 2340,  
2340, 2453, 2606, 2611, 2616  
communication theory  
.... 2611  
community  
.... 2528  
community development  
.... 2184, 2212, 2214, 2247, 2306, 2310,  
2350, 2583  
community education  
.... 2247  
companion crops  
.... 2002  
competition  
.... 1989  
computer analysis  
.... 2328  
computer hardware  
.... 2336, 2344  
computer simulation  
.... 2022, 2097, 2098, 2114, 2149  
computer software  
.... 2336, 2343, 2344  
computer techniques  
.... 2336  
computers  
.... 2336, 2343, 2344, 2365  
constraints  
.... 1953, 1956, 1968, 1969, 2000, 2076,  
2079, 2082, 2159, 2181, 2197, 2216,  
2224, 2237, 2253, 2257, 2313, 2319,  
2331, 2339, 2370, 2378, 2406, 2438,  
2450, 2463, 2473, 2493, 2500, 2513,  
2540, 2560, 2576, 2588, 2603, 2661  
consultants  
.... 2288  
consumer behavior  
.... 2530  
consumer costs  
.... 1974  
consumer preferences  
.... 2219, 2530  
consumer surveys  
.... 2530  
  
consumption  
.... 2286, 2289, 2435, 2629  
continuing education  
.... 2264, 2649  
contour ridging  
.... 2100  
contraception  
.... 2312  
control methods  
.... 2089, 2123  
cooking  
.... 2351  
cooperation  
.... 1999  
cooperative activities  
.... 2663  
cooperative credit  
.... 2184, 2280  
cooperative farming  
.... 2209  
cooperatives  
.... 2186, 2194, 2310, 2541  
coordination  
.... 2605  
coownership  
.... 1966, 2115  
core-periphery relations  
.... 2294, 2295  
cost analysis  
.... 2051, 2104, 2400, 2403, 2409, 2416,  
2424, 2427  
cost benefit analysis  
.... 2104, 2168, 2255, 2301, 2345, 2364,  
2409, 2444, 2558, 2594, 2654  
cost of production  
.... 2399  
cost prices  
.... 2404  
Costa Rica  
.... 1968, 1968, 2041, 2180, 2187, 2485,  
2606, 2616  
costs  
.... 2261, 2261, 2287, 2392, 2516  
cotton  
.... 1966, 2029, 2102, 2177, 2409, 2430  
cotton industry  
.... 2177  
cover crops  
.... 2057  
cowpeas  
.... 1966, 2362  
cows  
.... 2047, 2063

credit  
     .... 1961, 2172, 2178, 2179, 2187, 2261,  
         2261, 2262, 2278, 2279, 2281, 2283,  
         2284, 2667  
 credit policy  
     .... 2278, 2279, 2281, 2283, 2284  
 crop analysis  
     .... 2151  
 crop damage  
     .... 2438  
 crop density  
     .... 2087, 2132  
 crop enterprises  
     .... 1957, 2140  
 crop husbandry  
     .... 1968, 1975  
 crop management  
     .... 2022, 2546, 2600  
 crop mixtures  
     .... 2086  
 crop production  
     .... 1951, 1955, 1956, 1959, 1968, 1972,  
         1974, 1975, 1986, 1993, 1994, 1996,  
         1997, 2000, 2001, 2006, 2018, 2028,  
         2036, 2037, 2045, 2055, 2062, 2067,  
         2075, 2081, 2084, 2087, 2089, 2089,  
         2101, 2106, 2117, 2130, 2137, 2152,  
         2223, 2226, 2231, 2232, 2236, 2283,  
         2323, 2385, 2386, 2388, 2390, 2391,  
         2392, 2393, 2397, 2398, 2399, 2400,  
         2401, 2405, 2412, 2416, 2417, 2420,  
         2421, 2422, 2424, 2426, 2427, 2428,  
         2457, 2461, 2470, 2471, 2474, 2476,  
         2497, 2503, 2518, 2521, 2522, 2529,  
         2563, 2580, 2581, 2587, 2595, 2612,  
         2665  
 crop production costs  
     .... 2390, 2401, 2412, 2417, 2422  
 crop research  
     .... 2633  
 crop residues  
     .... 2055, 2065  
 crop systems  
     .... 2021  
 crop yield  
     .... 2016, 2089, 2123  
 cropping  
     .... 2498  
 cropping systems  
     .... 1953, 1961, 1964, 1966, 1968, 1970,  
         1971, 1972, 1973, 1975, 1980, 1981,  
         1982, 1985, 1986, 1987, 1988, 1989,  
         1990, 1991, 1992, 1994, 1996, 1997,  
         1998, 2000, 2002, 2003, 2005, 2006,

cropping systems (con't)  
     .... 2007, 2009, 2012, 2013, 2014, 2015,  
         2018, 2019, 2022, 2024, 2025, 2027,  
         2028, 2035, 2037, 2039, 2072, 2086,  
         2093, 2114, 2131, 2140, 2147, 2154,  
         2159, 2160, 2161, 2183, 2187, 2189,  
         2225, 2264, 2345, 2362, 2363, 2364,  
         2408, 2411, 2414, 2430, 2438, 2445,  
         2455, 2475, 2478, 2483, 2499, 2509,  
         2517, 2519, 2520, 2586, 2601, 2602,  
         2606, 2613, 2616, 2622, 2627, 2631  
 crops  
     .... 1956, 1958, 1984, 2064, 2068, 2123,  
         2129, 2242, 2250, 2250, 2388, 2400,  
         2404, 2421, 2425, 2429, 2434, 2510,  
         2586  
 CRSP  
     .... 2569  
 cucumbers  
     .... 2001, 2067  
 cultivars  
     .... 2107, 2124, 2125, 2150  
 cultivation  
     .... 1955, 2139, 2144, 2151, 2354, 2506,  
         2600  
 cultivation methods  
     .... 1955, 1972, 2124, 2125, 2139, 2144,  
         2147, 2411  
 cultural change  
     .... 2214  
 cultural control  
     .... 2124, 2125  
 cultural ecology  
     .... 1960  
 cultural environment  
     .... 2268  
 cultural hegemony  
     .... 2294, 2295  
 cultural heritage  
     .... 2141  
 cultural policy  
     .... 2294, 2295  
 cultural sociology  
     .... 2141, 2191, 2200, 2294, 2295, 2316,  
         2467, 2545, 2551, 2618, 2661  
 curriculum  
     .... 2635, 2650, 2653, 2655, 2666  
 cyanobacteria  
     .... 2165  
 dairy farming  
     .... 2047, 2385  
 dairy herds  
     .... 2052

dairying  
.... 2047

data collection  
.... 2042, 2096, 2114, 2135, 2140, 2197,  
2277, 2294, 2295, 2320, 2410, 2450,  
2451, 2455, 2458, 2459, 2466, 2467,  
2493, 2501, 2510, 2514, 2527, 2535,  
2536, 2536, 2538, 2540, 2545, 2547,  
2548, 2549, 2550, 2551, 2553, 2554,  
2558, 2559, 2560, 2566, 2568, 2570,  
2574, 2575, 2579, 2585, 2597, 2598,  
2601, 2602, 2664, 2667

data processing  
.... 2365, 2501

databases  
.... 2140

decision making  
.... 1957, 1985, 2043, 2079, 2105, 2211,  
2215, 2216, 2236, 2287, 2379, 2386,  
2406, 2431, 2432, 2433, 2434, 2436,  
2439, 2440, 2443, 2451, 2459, 2467,  
2479, 2480, 2481, 2482, 2490, 2527,  
2553, 2554, 2555, 2556, 2557, 2576,  
2610, 2633, 2634, 2644, 2648

deep black soils  
.... 2079

deep water rice  
.... 2083

deforestation  
.... 2007, 2038

demand  
.... 2402

demography  
.... 2326

demonstration farms  
.... 2251

density  
.... 2087

dependency theory  
.... 2185, 2498

descriptive statistics  
.... 1962, 2199, 2396, 2527

desertification  
.... 2569

design  
.... 2481, 2585

design calculations  
.... 2151

design criteria  
.... 2481

Desmodium ovalifolium  
.... 2057

determination  
.... 2339, 2525

deterministic models  
.... 2490

developing countries  
.... 2172, 2193, 2317, 2324

development  
.... 1956, 1973, 1981, 1994, 2041, 2201,  
2236, 2238, 2254, 2339, 2371, 2375,  
2376, 2384, 2385, 2386, 2481, 2491,  
2517, 2528, 2586, 2591, 2610, 2621,  
2644

development agencies  
.... 2230, 2246, 2247, 2260, 2260, 2263,  
2269, 2276, 2308, 2312, 2328, 2458,  
2462, 2528, 2660

development aid  
.... 2247, 2260, 2260, 2276, 2308, 2319,  
2642

development plans  
.... 2172, 2194, 2294, 2295, 2320

development policy  
.... 2179, 2182, 2187, 2190, 2202, 2252,  
2260, 2260, 2279, 2294, 2295, 2296,  
2306, 2307, 2309, 2315, 2329, 2331,  
2376, 2460, 2466, 2551, 2623,

development projects  
.... 2248, 2293, 2294, 2297, 2300, 2308,  
2340, 2340, 2468, 2475, 2545, 2559,  
2634, 2637, 2639

development studies  
.... 2247, 2468

development theories  
.... 2182, 2260, 2260, 2582

developmental history  
.... 1984, 1998, 2004, 2004, 2085, 2121,  
2135, 2149, 2181, 2185, 2186, 2190,  
2201, 2203, 2214, 2224, 2230, 2234,  
2237, 2245, 2246, 2249, 2250, 2250,  
2254, 2260, 2260, 2267, 2274, 2298,  
2302, 2306, 2310, 2321, 2322, 2324,  
2325, 2330, 2338, 2385, 2404, 2441,  
2463, 2464, 2468, 2487, 2495, 2496,  
2498, 2506, 2507, 2526, 2528, 2532,  
2544, 2617, 2623, 2625, 2629, 2638,  
2641, 2652, 2661

developmental policy  
.... 2609

diabrotica balteata  
.... 2154

dictionaries  
.... 2162

diet studies  
.... 2217

diets  
.... 2217

diffusion of information  
.... 2148, 2260, 2260, 2268, 2270, 2271,  
2277, 2300, 2520, 2611, 2614, 2616,  
2619  
diffusion of innovation  
.... 2272  
diffusion of research  
.... 2134, 2149, 2180, 2224, 2262, 2323,  
2347, 2347, 2352, 2355, 2361, 2456,  
2534, 2541, 2576, 2578, 2608, 2616,  
2656  
DIGESA  
.... 2383  
disease control  
.... 2001, 2028, 2081, 2123, 2126  
disease prevention  
.... 2123  
disease resistance  
.... 2429  
disease surveys  
.... 2123  
diseases  
.... 2001, 2081, 2087, 2124, 2125, 2126,  
2129, 2397, 2506, 2516, 2522, 2587  
distribution  
.... 2430, 2512  
diversification  
.... 2140, 2261, 2261, 2440  
dogs  
.... 2063  
domestic animals  
.... 1951  
domestic gardens  
.... 2002, 2011, 2264, 2463  
domestic markets  
.... 2257  
domestic production  
.... 2260, 2260  
Dominican Republic  
.... 2094, 2112, 2112, 2180, 2384  
donkeys  
.... 2063, 2072  
double cropping  
.... 2114, 2178  
draft animals  
.... 2063, 2068, 2446  
draught  
.... 1966, 2445  
draught animals  
.... 1956, 2040, 2045, 2053, 2066  
drought  
.... 2114, 2435  
drought resistance  
.... 2137  
dry conditions  
.... 2574  
dry farming  
.... 2430, 2595  
dryland agriculture  
.... 2595  
dual purpose  
.... 1951, 1972, 2075  
dual purpose breeds  
.... 2068  
dwarf beans  
.... 2124  
East Africa  
.... 2188, 2339, 2464, 2558, 2559  
ecological balance  
.... 1998, 2007, 2090, 2160, 2161, 2214  
ecology  
.... 1998, 2007, 2160, 2161, 2189, 2203,  
2483  
econometric models  
.... 2379  
econometrics  
.... 1985, 2474  
economic  
.... 2385  
economic analysis  
.... 1953, 1956, 1963, 1985, 1986, 2006,  
2012, 2013, 2021, 2023, 2028, 2049,  
2051, 2067, 2087, 2102, 2104, 2112,  
2112, 2120, 2152, 2168, 2182, 2185,  
2226, 2251, 2253, 2254, 2284, 2301,  
2317, 2318, 2343, 2365, 2384, 2386,  
2390, 2391, 2392, 2398, 2399, 2400,  
2401, 2402, 2403, 2404, 2405, 2407,  
2409, 2410, 2411, 2412, 2416, 2417,  
2418, 2419, 2420, 2422, 2424, 2425,  
2426, 2427, 2433, 2441, 2470, 2476,  
2478, 2479, 2483, 2490, 2497, 2502,  
2503, 2504, 2504, 2509, 2516, 2522,  
2534, 2558, 2564, 2577, 2587, 2588,  
2609, 2622, 2630  
economic development  
.... 2178, 2181, 2199, 2209, 2217, 2299,  
2307, 2328, 2332, 2337, 2367, 2387,  
2487  
economic evaluation  
.... 2043, 2368, 2586  
economic growth  
.... 2257  
economic resources  
.... 2252, 2388  
economic situation  
.... 1955

economic theories  
     .... 2504, 2504  
 economics  
     .... 2081, 2087, 2284, 2388, 2392, 2404,  
         2405, 2419, 2421, 2442, 2504, 2504  
 Economics Program  
     .... 2544, 2621  
 economies of scale  
     .... 2287  
 ecosystems  
     .... 1998, 2007, 2049, 2085, 2154, 2490  
 Ecuador  
     .... 1990, 2057, 2061, 2167, 2254, 2363,  
         2414, 2477, 2567, 2589, 2621, 2628  
 education  
     .... 1973, 2187, 2193, 2215, 2239, 2260,  
         2407, 2425, 2643, 5460  
 educational institutions  
     .... 2643  
 educational opportunities  
     .... 2643  
 educational planning  
     .... 2635, 2643, 2650, 2653, 2655, 2666  
 egg production  
     .... 2048  
 Egypt  
     .... 2003, 2180, 2191  
 ejidos  
     .... 1961  
 El Salvador  
     .... 1981, 1983, 1984, 1986, 1994, 2250,  
         2250, 2258, 2261, 2261, 2439  
 electricity  
     .... 2350  
 electrification  
     .... 2350  
 elephant  
     .... 2063  
 eleusine coracana  
     .... 2546  
 elites  
     .... 2545  
 elk  
     .... 2063  
 employment  
     .... 2261, 2261, 2329, 2348, 2662  
 empoasca  
     .... 2154  
 energy  
     .... 1989, 2349, 2629  
 energy conservation  
     .... 2136  
 energy cost of activities  
     .... 2358  
 energy cost of production  
     .... 1992, 2003, 2207  
 energy intake  
     .... 2217  
 energy relations  
     .... 2349  
 energy sources  
     .... 2003, 2350  
 energy utilization  
     .... 2351  
 enterprises  
     .... 2510  
 entomology  
     .... 2124, 2125  
 environment  
     .... 2490  
 environmental degradation  
     .... 2326  
 environmental factors  
     .... 1968, 2090, 2096, 2098, 2214, 2386,  
         2509, 2516  
 environmental assessment  
     .... 2211  
 environmental factors  
     .... 2009, 2080, 2324  
 environmental policy  
     .... 2498, 2609  
 equidae  
     .... 1951  
 eroded soils  
     .... 2101  
 erosion  
     .... 1967, 1968, 2005, 2007, 2034, 2096,  
         2516  
 erosion control  
     .... 2100, 2112, 2112  
 Establishment of Institute project  
     .... 2241  
 ethical issues  
     .... 2182  
 Ethiopia  
     .... 2558  
 ethnic groups  
     .... 2200  
 ethnicity  
     .... 2200  
 ethnomethodology  
     .... 2467, 2527, 2545  
 evaluation  
     .... 1956, 1961, 1967, 1985, 1990, 1991,  
         2002, 2022, 2043, 2051, 2073, 2075,  
         2084, 2089, 2096, 2109, 2120, 2123,  
         2124, 2125, 2136, 2137, 2146, 2180,  
         2183, 2209, 2215, 2235, 2238, 2240,

evaluation (con't)  
     .... 2250, 2250, 2251, 2254, 2259, 2269,  
         2271, 2272, 2274, 2278, 2279, 2284,  
         2304, 2313, 2319, 2320, 2340, 2340,  
         2341, 2360, 2361, 2379, 2381, 2385,  
         2389, 2395, 2402, 2418, 2420, 2428,  
         2432, 2438, 2444, 2445, 2457, 2458,  
         2459, 2461, 2462, 2463, 2466, 2467,  
         2473, 2478, 2481, 2482, 2484, 2490,  
         2491, 2492, 2501, 2506, 2508, 2512,  
         2515, 2517, 2518, 2521, 2525, 2527,  
         2529, 2531, 2532, 2533, 2534, 2551,  
         2558, 2559, 2565, 2567, 2580, 2581,  
         2587, 2591, 2595, 2596, 2597, 2603,  
         2612, 2617, 2619, 2620, 2624, 2633,  
         2640, 2654, 2667  
 evaluation cassava  
     .... 2576  
 evaluation cropping systems  
     .... 2644  
 evaluation of research  
     .... 2542, 2582, 2637  
 evaporation  
     .... 2098  
 evolution  
     .... 2121  
 Ex-ante evaluations  
     .... 2603  
 experimental designs  
     .... 2018, 2132, 2149, 2251, 2312, 2380,  
         2512, 2537, 2621, 2623, 2644  
 experimental plots  
     .... 2026, 2080, 2117, 2132, 2622  
 experimental results  
     .... 2018, 2022, 2089, 2114, 2428, 2588  
 experimental stations  
     .... 2047, 2607, 2609  
 experiments  
     .... 2036, 2101, 2106, 2110, 2136, 2149,  
         2234, 2389, 2595, 2609  
 exports  
     .... 1974  
 extension  
     .... 1963, 1968, 1987, 2000, 2103, 2179,  
         2180, 2187, 2188, 2204, 2222, 2224,  
         2237, 2258, 2260, 2260, 2263, 2264,  
         2266, 2267, 2268, 2269, 2270, 2271,  
         2272, 2273, 2275, 2276, 2277, 2288,  
         2304, 2310, 2315, 2316, 2319, 2323,  
         2343, 2383, 2453, 2459, 2473, 2485,  
         2494, 2511, 2515, 2536, 2536, 2539,  
         2541, 2543, 2578, 2586, 2591, 2593,  
         2598, 2605, 2606, 2608, 2610, 2611,  
         2614, 2615, 2616, 2617, 2618, 2619,  
         2620, 2635, 2639, 2640, 2645, 2645,  
         2650, 2655, 2666, 2667  
 extension activities  
     .... 2148  
 factor analysis  
     .... 2021, 2357, 2419, 2423, 2518, 2530  
 factors of production  
     .... 1953, 1957, 2021, 2036, 2087, 2089,  
         2178, 2179, 2205, 2234, 2258, 2325,  
         2382, 2385, 2387, 2395, 2403, 2404,  
         2419, 2423, 2433, 2436, 2442, 2503,  
         2518, 2563, 2587, 2595, 2612  
 fallow  
     .... 2080, 2432  
 following  
     .... 1999  
 family farming  
     .... 2413  
 family labour  
     .... 1968, 2362, 2418, 2445, 2447  
 family planning  
     .... 2193, 2309, 2312  
 family size  
     .... 1973  
 FAO  
     .... 2127, 2324, 2340, 2340  
 farm development plans  
     .... 2184  
 farm enterprises  
     .... 2434  
 farm equipment  
     .... 2343, 2346, 2409  
 farm experiments  
     .... 2251  
 farm income  
     .... 1965, 2061, 2174, 2440  
 farm inputs  
     .... 2146, 2174, 2293, 2647, 2647  
 farm leases  
     .... 2445  
 farm level studies  
     .... 2605  
 farm machinery  
     .... 2346, 2563  
 farm management  
     .... 1985, 2043, 2046, 2147, 2215, 2231,  
         2253, 2264, 2265, 2382, 2406, 2408,  
         2410, 2435, 2440, 2555, 2557, 2577,  
         2624, 2630  
 farm models  
     .... 2542, 2624, 2644  
 farm planning  
     .... 2376, 2406

farm results  
     .... 2595  
 farm size  
     .... 1973, 1999, 2061, 2258, 2357, 2447  
 farm storage  
     .... 2286  
 farm surveys  
     .... 1959, 1961, 2353, 2389, 2410, 2510,  
         2540, 2550, 2570  
 farm testing  
     .... 2532  
 farm tests  
     .... 2380, 2469, 2492, 2595  
 farm trials  
     .... 2534  
 farm workers  
     .... 2345  
 farmer testing  
     .... 2536, 2536, 2597, 2663  
 farmers  
     .... 2389, 2544, 2556, 2614  
 farmers' attitudes  
     .... 1957, 2015, 2197, 2216, 2354, 2364,  
         2381, 2386, 2431, 2463, 2523, 2544,  
         2546, 2556, 2571, 2588, 2631, 2658,  
         2662  
 farmers' income  
     .... 2325, 2404, 2662  
 farmers' participation  
     .... 2414, 2514, 2597, 2645, 2645, 2647  
 farmers' associations  
     .... 2183  
 farming  
     .... 2034, 2057  
 farming calendar  
     .... 1965, 1988, 2546  
 farming systems  
     .... 1951, 1953, 1956, 1959, 1965, 1968,  
         1969, 1972, 1973, 1998, 2010, 2023,  
         2039, 2044, 2045, 2048, 2050, 2056,  
         2060, 2066, 2069, 2070, 2071, 2074,  
         2076, 2078, 2079, 2080, 2082, 2086,  
         2159, 2174, 2177, 2183, 2186, 2197,  
         2220, 2225, 2227, 2228, 2263, 2323,  
         2342, 2351, 2356, 2362, 2366, 2414,  
         2421, 2435, 2444, 2453, 2457, 2464,  
         2481, 2482, 2487, 2489, 2490, 2493,  
         2498, 2502, 2510, 2513, 2517, 2520,  
         2521, 2524, 2526, 2534, 2536, 2536,  
         2537, 2543, 2546, 2556, 2557, 2561,  
         2577, 2583, 2614, 2617, 2618, 2624,  
         2627, 2629, 2630, 2657, 2667  
 farming systems research  
     .... 1980, 2023, 2064, 2068, 2131, 2188,  
         2273, 2285, 2297, 2351, 2454, 2455,  
         2460, 2462, 2465, 2466, 2467, 2480,  
         2485, 2489, 2490, 2494, 2511, 2519,  
         2527, 2536, 2539, 2541, 2545, 2557,  
         2562, 2569, 2578, 2579, 2584, 2597,  
         2616, 2618, 2620, 2622, 2630, 2631,  
         2635, 2637, 2639, 2650, 2651, 2655,  
         2656, 2659, 2661, 2666,  
 feasibility studies  
     .... 2462  
 feed conversion efficiency  
     .... 2044  
 feed grains  
     .... 2074  
 feed products  
     .... 2065  
 feed requirements  
     .... 2063  
 feedback  
     .... 2258  
 feeding  
     .... 2077, 2166, 2168  
 feeding behavior  
     .... 2044  
 feedlots  
     .... 2166  
 feeds  
     .... 2055, 2061, 2071  
 female labour  
     .... 2447, 2448  
 fertility  
     .... 2117  
 fertilization  
     .... 1951, 1955, 1961, 1986, 2001, 2006,  
         2021, 2028, 2036, 2081, 2083, 2089,  
         2106, 2123, 2394, 2397, 2400, 2427,  
         2457, 2461, 2470, 2506, 2521, 2522,  
         2529, 2531, 2563, 2580, 2581  
 fertilizer  
     .... 2224, 2237  
 fertilizer analysis  
     .... 2531  
 fertilizer application  
     .... 2106, 2357, 2432  
 fertilizer industry  
     .... 2146  
 fertilizer placement  
     .... 2600  
 fertilizer requirement determination  
     .... 2102  
 fertilizer responses  
     .... 2073, 2103, 2153

fertilizer technology  
.... 2283, 2576

fertilizer use  
.... 2146

fertilizers  
.... 2084, 2087, 2089, 2102, 2103, 2104,  
2105, 2108, 2110, 2150, 2165, 2196,  
2283, 2353, 2370, 2388, 2404, 2417,  
2426, 2427, 2506, 2509, 2587

field crops  
.... 1988

field experimentation  
.... 1991, 2018, 2022, 2027, 2089, 2117,  
2131, 2132, 2154, 2455, 2542, 2599,  
2605, 2608, 2618, 2622, 2623

field test  
.... 2525

field tests  
.... 2237, 2576

finance  
.... 2126, 2260

financing research  
.... 2126, 2301, 2333

finger millet  
.... 2546

firms  
.... 2337

fish farming  
.... 2323

Florida  
.... 1963, 2025, 2042, 2043, 2105, 2122,  
2150, 2231, 2264, 2396, 2409, 2443,  
2629

Florida Farming Systems Research and Exte  
.... 2297

flowers  
.... 1951

fodder crops  
.... 2077

food  
.... 2370

food consumption  
.... 2217, 2221, 2259, 2311, 2530

food crops  
.... 1965

food distribution and marketing  
.... 2286, 2303, 2317

food grains  
.... 1956, 2074, 2332

food habits  
.... 2135

food intake  
.... 2217

food policy  
.... 2245, 2253, 2303, 2314, 2317, 2318,  
2334

food preferences  
.... 1964, 2530

food prices  
.... 2311

food production  
.... 2002, 2003, 2011, 2039, 2060, 2074,  
2078, 2079, 2109, 2141, 2145, 2174,  
2177, 2203, 2216, 2217, 2223, 2230,  
2237, 2248, 2253, 2264, 2298, 2324,  
2415, 2456, 2526, 2662

Food Productivity and Nutrition Project  
.... 2508

food supply  
.... 2174, 2237, 2303, 2311, 2314, 2546,  
2556

food technology  
.... 2519

forage  
.... 2042, 2056, 2167

forage crops  
.... 2055, 2061, 2077

forage legumes  
.... 2057, 2150, 2167

foraging  
.... 2077

forest management  
.... 2038

forest policy  
.... 2038

forest trees  
.... 2057

forestry  
.... 1969, 2037, 2038, 2095

forests  
.... 2038, 2039

fruit  
.... 2010, 2129, 2184, 2231

fruit analysis  
.... 2129

fruit products  
.... 2129

FSR  
.... 1958, 1960, 1965, 1968, 1970, 1971,  
1982, 1985, 2062, 2073, 2080, 2090,  
2115, 2137, 2159, 2177, 2220, 2221,  
2226, 2236, 2249, 2251, 2254, 2259,  
2266, 2302, 2305, 2339, 2354, 2359,  
2362, 2368, 2371, 2373, 2375, 2376,  
2378, 2380, 2385, 2406, 2407, 2411,  
2413, 2441, 2450, 2451, 2464, 2469,  
2472, 2473, 2474, 2475, 2476, 2477,

FSR (con't)

- .... 2478, 2479, 2486, 2487, 2489, 2490, 2491, 2492, 2495, 2496, 2499, 2500, 2501, 2502, 2503, 2505, 2507, 2509, 2512, 2513, 2515, 2516, 2520, 2522, 2525, 2526, 2532, 2535, 2536, 2543, 2544, 2546, 2548, 2550, 2552, 2556, 2560, 2561, 2564, 2565, 2566, 2567, 2571, 2572, 2577, 2585, 2586, 2588, 2589, 2591, 2595, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2607, 2609, 2610, 2613, 2615, 2621, 2623, 2625, 2626, 2628, 2633, 2636, 2638, 2640, 2641, 2644, 2645, 2645, 2646, 2647, 2647, 2652, 2657, 2658, 2660, 2662

FSSP

- .... 2045

fuel oils

- .... 2003

fuels

- .... 2348, 2349, 2370

fuelwood

- .... 2056, 2057

functions

- .... 2262

fungal diseases

- .... 2126

Gambia

- .... 2177, 2180

game animals

- .... 2049

game meat

- .... 2049

gardens

- .... 2002, 2011

gene banks

- .... 2127, 2128

genetic analysis

- .... 2025

genetic change

- .... 2128

genetic engineering

- .... 2128

genetic resources

- .... 2127

genetic variation

- .... 2128

geographical distribution

- .... 2512

Geometry

- .... 2151

germplasm

- .... 2124, 2125, 2127, 2352, 2656

Ghana

- .... 1959
- glycine max
  - .... 2511
- goat feeding
  - .... 2065
- goats
  - .... 2044, 2048, 2052, 2054, 2061, 2063, 2065, 2078
- government organizations
  - .... 2179, 2248, 2255, 2260, 2634, 2648
- government research
  - .... 2337
- grain stores
  - .... 1968, 1975
- grapes
  - .... 2019
- graphs
  - .... 1962
- grassroots approach
  - .... 2206
- grazing
  - .... 2043, 2047, 2052, 2057, 2075, 2077
- grazing intensity
  - .... 2538
- green gram
  - .... 2027
- green revolution
  - .... 2145, 2256, 2310, 2356, 2361, 2463
- gross margins
  - .... 1965
- ground nuts
  - .... 1973, 2019
- groundnuts
  - .... 1965, 1970, 1971
- group behaviour
  - .... 2200
- group integration
  - .... 2200
- groups
  - .... 2200
- growth factors
  - .... 2113
- growth stress
  - .... 2113

Guatemala

- .... 1951, 1955, 1993, 1996, 1997, 2001, 2006, 2028, 2039, 2041, 2067, 2075, 2081, 2084, 2106, 2123, 2129, 2136, 2137, 2137, 2152, 2189, 2197, 2201, 2218, 2225, 2229, 2233, 2234, 2235, 2238, 2240, 2241, 2243, 2286, 2302, 2338, 2352, 2359, 2377, 2383, 2389, 2390, 2391, 2392, 2393, 2394, 2395,

Guatemala (con't)  
     .... 2397, 2398, 2399, 2400, 2401, 2403,  
         2404, 2405, 2412, 2416, 2417, 2419,  
         2420, 2421, 2422, 2423, 2424, 2425,  
         2426, 2427, 2428, 2429, 2454, 2457,  
         2461, 2470, 2471, 2473, 2476, 2480,  
         2485, 2491, 2493, 2497, 2503, 2508,  
         2518, 2521, 2522, 2529, 2530, 2531,  
         2532, 2533, 2541, 2561, 2572, 2578,  
         2580, 2581, 2584, 2632, 2641, 2645,  
         2645, 2656, 2663  
 guide books  
     .... 2336, 2571  
 habitat improvement  
     .... 2155  
 habitats  
     .... 2124, 2125, 2155  
 Haiti  
     .... 2069, 2087, 2265, 2506, 2587, 2612  
 hand tools  
     .... 2072  
 handbooks  
     .... 2002, 2571  
 harvest  
     .... 2522  
 harvest date  
     .... 2035, 2497  
 harvesters  
     .... 2345, 2354  
 harvesting  
     .... 1951, 2001, 2081, 2198, 2285, 2470  
 hay  
     .... 2043  
 health  
     .... 2187, 2218, 2309, 2425  
 health resorts  
     .... 2101  
 health services  
     .... 2218, 2568  
 heat  
     .... 2113  
 herbicides  
     .... 2089, 2357, 2417  
 herbivores  
     .... 2490  
 high yielding varieties  
     .... 2029, 2107, 2145, 2146, 2206, 2237,  
         2256, 2293, 2324, 2463, 2545, 2600,  
         2662  
 higher education  
     .... 2239, 2643, 2649  
 highland sites  
     .... 2647, 2647  
 highlands  
     .... 1968, 2095, 2137, 2590  
 hill land  
     .... 2100, 2481  
 hill land soils  
     .... 2007  
 hill sites  
     .... 2481  
 hired labour  
     .... 2262, 2360, 2445, 2546  
 history  
     .... 2121  
 home economics  
     .... 2250, 2250, 2387, 2448  
 Honduras  
     .... 1960, 1988, 2187, 2372, 2408, 2490,  
         2594, 2606, 2607, 2616, 2626  
 horses  
     .... 2063  
 horticultural crops  
     .... 2123  
 horticulture  
     .... 2002, 2011, 2273  
 horticulture crops  
     .... 2231  
 household consumption  
     .... 1974, 2448  
 households  
     .... 1958, 1964, 1968, 1970, 1971, 1975,  
         2219, 2307, 2481  
 housing  
     .... 2425  
 human activity  
     .... 2085  
 human nutrition  
     .... 2124, 2125, 2134, 2135  
 human power  
     .... 2003, 2100  
 human resources  
     .... 2250, 2388, 2497, 2632, 2656  
 humid tropical soils  
     .... 2108  
 humid tropics  
     .... 1961, 2007, 2021, 2036, 2056, 2134,  
         2179, 2186, 2212, 2483  
 humid zones  
     .... 1989, 2012, 2013  
 hunger  
     .... 2298, 2334  
 husbandry  
     .... 2145, 2207, 2326  
 hybrid varieties  
     .... 2137, 2308, 2338, 2647, 2647,

hybrids  
   .... 2219  
 hydroelectric schemes  
   .... 2350  
 IARC  
   .... 2127  
 IBPGR  
   .... 2127, 2324  
 ICA  
   .... 2449, 2649  
 ICARDA  
   .... 2073, 2127, 2324  
 ICRISAT  
   .... 2072, 2127, 2138, 2324, 2356, 2500,  
   2595  
 ICTA  
   .... 2028, 2075, 2136, 2137, 2197, 2229,  
   2233, 2234, 2235, 2236, 2238, 2240,  
   2241, 2242, 2243, 2244, 2286, 2302,  
   2352, 2373, 2377, 2383, 2389, 2394,  
   2395, 2412, 2419, 2420, 2421, 2425,  
   2427, 2428, 2429, 2454, 2457, 2471,  
   2473, 2476, 2480, 2485, 2491, 2503,  
   2508, 2521, 2522, 2529, 2530, 2531,  
   2532, 2533, 2541, 2543, 2561, 2562,  
   2562, 2572, 2573, 2578, 2580, 2632,  
   2636, 2641, 2644, 2645, 2645, 2646,  
   2656, 2663  
 IDB  
   .... 2352, 2656  
 identification  
   .... 2162, 2477  
 ideology  
   .... 2210, 2306, 2310, 5460  
 IDIAP  
   .... 2089, 2492, 2654  
 IFAS  
   .... 2042, 2231, 2264, 2396  
 IFPRI  
   .... 2245, 2324  
 IITA  
   .... 2127, 2223, 2251, 2324, 2356, 2597  
 ILCA  
   .... 2064, 2070, 2324, 2356  
 ILRAD  
   .... 2324  
 immigration  
   .... 2214  
 implementation of research  
   .... 2352, 2464, 2605, 2616, 2637, 2638,  
   2659  
 imports  
   .... 2261, 2261  
 improved practices  
   .... 2080  
 improvement  
   .... 2137, 2251, 2385, 2603  
 income  
   .... 1964, 1968, 1975, 2261, 2261, 2318,  
   2329, 2378, 2382, 2390, 2392, 2404,  
   2422, 2426, 2435  
 income distribution  
   .... 2198, 2199, 2317, 2329  
 income transfers  
   .... 2303  
 incorporation methods  
   .... 2106  
 indexes  
   .... 2219  
 India  
   .... 1964, 1973, 1974, 1999, 2016, 2029,  
   2071, 2079, 2080, 2115, 2116, 2120,  
   2121, 2146, 2153, 2191, 2192, 2219,  
   2247, 2256, 2268, 2280, 2303, 2310,  
   2332, 2339, 2345, 2351, 2430, 2432,  
   2435, 2438, 2439, 2440, 2445, 2446,  
   2447, 2500, 2595, 2600, 2623  
 Indonesia  
   .... 2180, 2191, 2224, 2293, 2340, 2340,  
   2346, 2613  
 induced innovations  
   .... 2338, 2376  
 industrial methods  
   .... 2243  
 industrialization  
   .... 2181, 2190  
 industry  
   .... 2337  
 informal sector  
   .... 2280  
 informal surveys  
   .... 1951, 1955, 2001, 2081, 2094, 2397,  
   2410, 2469, 2553, 2563, 2568, 2570,  
   2573, 2636  
 information  
   .... 2216, 2239, 2258, 2436, 2505, 2611,  
   2614  
 information flow  
   .... 2229, 2614  
 information needs  
   .... 2367, 2505, 2611, 2619  
 information processing  
   .... 2505, 2611  
 information retrieval  
   .... 2140, 2611  
 information services  
   .... 2245, 2372, 2505

information storage  
     .... 2140  
 infrastructure  
     .... 2172, 2179, 2186, 2263, 2546  
 INIAP  
     .... 2514  
 innovation  
     .... 2324  
 innovation adoption  
     .... 1959, 1968, 1980, 1987, 2000, 2006,  
         2015, 2040, 2075, 2079, 2082, 2102,  
         2103, 2136, 2148, 2152, 2173, 2178,  
         2188, 2191, 2199, 2205, 2206, 2214,  
         2216, 2223, 2226, 2235, 2258, 2259,  
         2263, 2267, 2270, 2277, 2293, 2300,  
         2308, 2312, 2338, 2339, 2352, 2353,  
         2354, 2355, 2357, 2361, 2363, 2373,  
         2376, 2377, 2381, 2383, 2386, 2389,  
         2395, 2396, 2411, 2419, 2421, 2431,  
         2433, 2436, 2437, 2441, 2444, 2461,  
         2463, 2465, 2469, 2476, 2479, 2491,  
         2492, 2494, 2501, 2508, 2510, 2514,  
         2515, 2518, 2520, 2523, 2524, 2529,  
         2531, 2533, 2541, 2544, 2556, 2557,  
         2576, 2577, 2578, 2580, 2581, 2582,  
         2584, 2586, 2588, 2589, 2594, 2596,  
         2597, 2606, 2608, 2609, 2612, 2613,  
         2629, 2631, 2651, 2654, 2656  
 innovations  
     .... 2316, 2376, 2541, 2614  
 input industries  
     .... 2629  
 input output analysis  
     .... 1968, 1975, 1980, 2072, 2104, 2215,  
         2255, 2265, 2362, 2409, 2430, 2435,  
         2474, 2595, 2629  
 insect control  
     .... 1961, 2084, 2157, 2158, 2417  
 insect pests  
     .... 1988, 2155, 2160, 2161  
 insecticide application  
     .... 2357  
 insecticides  
     .... 2089, 2417  
 insects  
     .... 2021, 2089, 2124, 2125, 2155, 2160,  
         2161, 2506, 2587  
 inservice training  
     .... 2407  
 institution building  
     .... 2180, 2202, 2222, 2234, 2235, 2241,  
         2247, 2256, 2267, 2268, 2272, 2273,  
         2275, 2276, 2283, 2315, 2324, 2468,  
         2569, 2597, 2632, 2633, 2645, 2645,  
         institution building (con't)  
             .... 2652, 2653, 2660  
 institutions  
     .... 2361  
 insurance  
     .... 2311  
 INTA  
     .... 2187  
 integrated control  
     .... 2155, 2156, 2161  
 integrated methods  
     .... 1985, 2155  
 integrated pest management  
     .... 2155, 2160, 2161  
 integrated systems  
     .... 1969, 2370, 2542  
 integration  
     .... 2576  
 intensification  
     .... 2147  
 intensive cropping  
     .... 1999, 2003, 2008, 2009, 2010, 2415,  
         2593  
 intensive farming  
     .... 2003, 2010, 2415  
 intensive husbandry  
     .... 2415  
 intensive production  
     .... 2147  
 interactions  
     .... 2106  
 intercropping  
     .... 1953, 1956, 1965, 1966, 1970, 1971,  
         1973, 2002, 2005, 2016, 2018, 2018,  
         2025, 2027, 2029, 2124, 2125, 2150,  
         2438, 2439  
 intercrops  
     .... 1959, 1992, 1999, 2014, 2546  
 interdisciplinary research  
     .... 1985, 2009, 2062, 2070, 2073, 2115,  
         2131, 2149, 2182, 2338, 2366, 2371,  
         2373, 2414, 2451, 2453, 2454, 2471,  
         2472, 2477, 2493, 2495, 2496, 2499,  
         2501, 2515, 2523, 2524, 2536, 2561,  
         2562, 2562, 2572, 2577, 2584, 2590,  
         2603, 2605, 2607, 2622, 2627, 2630,  
         2631, 2633, 2640, 2642, 2645, 2645,  
         2646, 2647, 2647, 2652  
 international cooperation  
     .... 2145, 2182, 2324  
 International Institute of Rural Reconstr  
     .... 2246  
 international organizations  
     .... 2245

interplanting  
.... 2005, 2018  
intertidal environment  
.... 2490  
interviews  
.... 2570  
INTSORMIL  
.... 1960, 2569  
inventories  
.... 2140  
investigation  
.... 2151  
investment  
.... 2252  
investment policy  
.... 2126  
investment requirements  
.... 2253  
IRRI  
.... 1985, 1991, 2145, 2149, 2249, 2256,  
2304, 2324, 2340, 2340, 2519, 2593,  
2595, 2597, 2608  
IRRI Mechanization Consequences Project  
.... 2340,  
irrigated farming  
.... 2120, 2121, 2304, 2430  
irrigated sites  
.... 2361  
irrigated systems  
.... 1991  
irrigation  
.... 1973, 1994, 1999, 2003, 2067, 2116,  
2117, 2120, 2121, 2122, 2146, 2153,  
2178, 2237, 2262, 2346, 2360, 2381,  
2432, 2437, 2445, 2448, 2593  
irrigation systems  
.... 2001, 2094, 2117, 2437  
irrigation water  
.... 2094  
ISNAR  
.... 2324  
Jamaica  
.... 2086, 2180  
Japan  
.... 2318, 2358  
Java  
.... 2198  
jojoba  
.... 2139, 2144  
Kentucky  
.... 2210  
Kenya  
.... 2049, 2215, 2288, 2308, 2322, 2464,  
2499  
labour  
.... 1952, 1956, 1968, 1968, 1970, 1971,  
1975, 2086, 2147, 2261, 2261, 2262,  
2328, 2346, 2360, 2361, 2418, 2499,  
2510, 2546  
labour allocation  
.... 2072, 2447  
labour contracts  
.... 2361, 2387  
labour costs  
.... 1980, 2385  
labour economics  
.... 2205, 2258, 2387  
labour market  
.... 1961, 1966, 2387, 2575  
labour productivity  
.... 2385  
labour requirements  
.... 2100, 2360, 2361, 2362  
land  
.... 2094, 2404, 2499  
land classification  
.... 2095  
land improvement  
.... 2100, 2484  
land management  
.... 2100, 2196, 2576, 2600  
land ownership  
.... 2184, 2262, 2381  
land preparation  
.... 2380  
land productivity  
.... 2576  
land reclamation  
.... 2100  
land reform  
.... 1951, 1972, 2205, 2206, 2252  
land resources  
.... 1956, 2404  
land tenure  
.... 1952, 1966, 1973, 2196, 2204, 2205,  
2258, 2308, 2384  
land types  
.... 2095  
land use  
.... 1951, 1953, 1961, 1968, 1968, 1969,  
1972, 1975, 1998, 2007, 2038, 2075,  
2094, 2095, 2147, 2189, 2190, 2261,  
2261, 2404, 2412, 2539  
land use systems  
.... 1965, 1999, 2192  
landlessness  
.... 2262

landscape conservation  
     .... 2095  
 languages  
     .... 2162  
 large farms  
     .... 1964, 2016, 2438  
 Latin America  
     .... 1979, 1989, 2017, 2037, 2039, 2048,  
         2054, 2071, 2095, 2133, 2167, 2180,  
         2187, 2194, 2240, 2254, 2257, 2283,  
         2314, 2326, 2333, 2341, 2342, 2363,  
         2410, 2481, 2485, 2501, 2541, 2543,  
         2567, 2589, 2606, 2616, 2628  
 learning by doing  
     .... 2222, 2247, 2312, 2635, 2636, 2650,  
         2653, 2655, 2666  
 legumes  
     .... 2056, 2083, 2138, 2511, 2630  
 Lesotho  
     .... 2180, 2273, 2418  
 lettuce  
     .... 1997  
 Liberia  
     .... 2180  
 light intensity  
     .... 2097  
 limiting factors  
     .... 1955, 1970, 1971, 2001, 2021, 2023,  
         2035, 2036, 2068, 2087, 2089, 2094,  
         2099, 2113, 2121, 2130, 2132, 2137,  
         2261, 2261, 2274, 2325, 2366, 2385,  
         2397, 2419, 2421, 2428, 2497, 2546,  
         2563, 2587, 2597, 2604, 2612, 2645,  
         2645  
 limiting factors of production  
     .... 2129  
 livestock  
     .... 1951, 1969, 1972, 1973, 2041, 2044,  
         2049, 2051, 2052, 2063, 2064, 2065,  
         2069, 2072, 2074, 2075, 2077, 2078,  
         2167, 2168, 2222, 2257, 2356, 2385,  
         2434, 2445, 2510, 2522, 2574, 2616,  
         2667  
 livestock enterprises  
     .... 2042, 2043, 2046, 2052, 2056, 2057,  
         2060, 2069, 2070, 2076, 2078, 2323,  
         2536, 2536, 2583  
 livestock farming  
     .... 1957, 2045, 2050, 2060, 2070, 2074,  
         2076  
 livestock management  
     .... 1970  
 livestock methodology  
     .... 2071  
 livestock products  
     .... 2049, 2054, 2065  
 living conditions  
     .... 2425  
 living standards  
     .... 2308, 2317, 2378, 2552  
 llamas  
     .... 2063  
 local planning  
     .... 2202  
 location of production  
     .... 2512  
 lowland areas  
     .... 2002, 2220, 2304  
 machinery  
     .... 2067, 2183, 2345  
 maize  
     .... 1952, 1953, 1955, 1956, 1959, 1961,  
         1965, 1966, 1968, 1968, 1972, 1975,  
         1981, 1988, 1993, 1994, 1996, 1997,  
         2001, 2005, 2006, 2012, 2013, 2014,  
         2018, 2018, 2019, 2025, 2026, 2028,  
         2035, 2036, 2061, 2067, 2075, 2081,  
         2087, 2089, 2102, 2103, 2104, 2106,  
         2110, 2127, 2136, 2137, 2137, 2152,  
         2154, 2185, 2188, 2222, 2226, 2236,  
         2242, 2265, 2289, 2308, 2338, 2352,  
         2377, 2385, 2388, 2389, 2390, 2391,  
         2392, 2393, 2394, 2397, 2398, 2399,  
         2400, 2401, 2403, 2404, 2405, 2409,  
         2412, 2416, 2417, 2419, 2421, 2422,  
         2424, 2425, 2426, 2427, 2428, 2433,  
         2444, 2457, 2461, 2470, 2476, 2484,  
         2497, 2499, 2503, 2506, 2508, 2514,  
         2518, 2521, 2522, 2529, 2530, 2531,  
         2533, 2546, 2563, 2580, 2581, 2587,  
         2605, 2612, 2632, 2640, 2654, 2656,  
         2665, 2667  
 maize seed production  
     .... 2389  
 maize storer  
     .... 2061  
 Malawi  
     .... 2321, 2464  
 Malaysia  
     .... 2178  
 Mali  
     .... 2177, 2515, 2538  
 malnutrition  
     .... 2218, 2220, 2298  
 management  
     .... 2043, 2046, 2193, 2244, 2305, 2340,  
         2340, 2385, 2434, 2458, 2459, 2484,  
         2516, 2639

management education  
.... 2193, 2459  
Manihot esculenta  
.... 2012, 2013  
manpower  
.... 2322  
manures  
.... 2055  
maps  
.... 2094, 2477  
marginal land  
.... 2056, 2257  
market  
.... 2445  
market economics  
.... 2287, 2332, 2382  
market economies  
.... 2314  
market prices  
.... 2303, 2332  
market regulations  
.... 2303  
market stabilization  
.... 2332  
marketable surplus  
.... 2448  
marketing  
.... 1952, 1955, 1963, 1968, 1974, 1975,  
2001, 2049, 2067, 2081, 2174, 2178,  
2204, 2231, 2261, 2261, 2289, 2293,  
2425, 2497, 2563, 2587, 2667  
markets  
.... 2257, 2287  
mass media  
.... 2260  
mathematical models  
.... 2151, 2594  
mathematics  
.... 2201  
Mauritania  
.... 2177  
meat  
.... 2065  
meat animals  
.... 2048, 2049, 2053, 2065  
mechanization  
.... 2034, 2063, 2067, 2196, 2340, 2340,  
2343, 2345, 2346, 2347, 2347, 2348,  
2358, 2563  
medicine auxiliaries  
.... 2218  
medium sized farms  
.... 1963, 1964, 2016  
melons  
.... 2001  
membership  
.... 2200  
merchants  
.... 1970, 1971  
metallurgy  
.... 2374  
metayage  
.... 2474  
methane  
.... 2323, 2374  
methodology  
.... 1951, 1955, 1959, 1960, 1965, 1972,  
1981, 1983, 1985, 1986, 1988, 1990,  
1996, 2001, 2021, 2041, 2051, 2062,  
2064, 2067, 2073, 2075, 2087, 2089,  
2089, 2090, 2093, 2094, 2095, 2096,  
2101, 2106, 2129, 2136, 2137, 2151,  
2159, 2168, 2197, 2217, 2220, 2226,  
2236, 2249, 2251, 2254, 2266, 2286,  
2297, 2302, 2305, 2312, 2339, 2340,  
2340, 2354, 2359, 2363, 2366, 2368,  
2371, 2373, 2375, 2376, 2378, 2380,  
2383, 2384, 2385, 2386, 2388, 2389,  
2390, 2391, 2392, 2394, 2395, 2397,  
2398, 2401, 2403, 2406, 2407, 2408,  
2411, 2414, 2416, 2417, 2419, 2420,  
2421, 2422, 2423, 2424, 2426, 2427,  
2428, 2429, 2444, 2450, 2451, 2454,  
2455, 2457, 2459, 2461, 2462, 2464,  
2465, 2467, 2469, 2470, 2471, 2472,  
2473, 2474, 2475, 2476, 2477, 2478,  
2479, 2480, 2482, 2486, 2487, 2489,  
2490, 2491, 2492, 2493, 2495, 2496,  
2497, 2499, 2501, 2502, 2503, 2504,  
2504, 2505, 2506, 2507, 2509, 2510,  
2512, 2515, 2516, 2518, 2520, 2521,  
2522, 2523, 2525, 2526, 2527, 2529,  
2530, 2531, 2532, 2533, 2535, 2536,  
2536, 2537, 2538, 2539, 2541, 2542,  
2543, 2544, 2545, 2547, 2548, 2549,  
2550, 2551, 2552, 2553, 2554, 2555,  
2556, 2557, 2558, 2559, 2560, 2561,  
2562, 2562, 2563, 2564, 2565, 2566,  
2567, 2568, 2570, 2571, 2572, 2573,  
2574, 2575, 2576, 2577, 2579, 2580,  
2581, 2585, 2586, 2587, 2588, 2589,  
2591, 2595, 2597, 2598, 2599, 2600,  
2601, 2603, 2605, 2607, 2608, 2609,  
2610, 2612, 2615, 2617, 2620, 2622,  
2623, 2624, 2625, 2626, 2627, 2628,  
2631, 2633, 2636, 2638, 2640, 2644,  
2646, 2647, 2647, 2658, 2660, 2661,

Mexico  
     .... 1961, 2039, 2047, 2133, 2181, 2256,  
         2318, 2353, 2380, 2433, 2463, 2468,  
         2474, 2479, 2483, 2662, 2665  
 Michigan  
     .... 1962, 2434  
 microcomputers  
     .... 2177, 2336, 2343, 2365  
 microeconomic analysis  
     .... 2448  
 Middle East  
     .... 2077, 2314  
 middlemen  
     .... 1970, 1971  
 migrants  
     .... 2189  
 migration  
     .... 2189, 2212, 2361, 2435  
 milk production  
     .... 2047, 2048, 2052, 2053  
 millet  
     .... 2546  
 millets  
     .... 1966, 1970, 1971, 2103, 2127, 2146,  
         2177, 2356, 2362  
 mineral deficiencies  
     .... 2167  
 mineral nutrition  
     .... 2167  
 mineral suppliments  
     .... 2167  
 minicomputers  
     .... 2597  
 minimum tillage  
     .... 2106  
 minimum tillage systems  
     .... 2034, 2086, 2147  
 mixed cropping  
     .... 1989, 2015, 2016, 2017, 2024, 2072,  
         2362  
 mixed farming  
     .... 1951, 1968, 1971, 1972, 2055, 2061,  
         2062, 2065, 2071, 2073, 2177, 2510,  
         2536, 2536, 2616  
 mixed systems  
     .... 2045, 2048, 2057, 2060, 2066, 2070,  
         2078, 2150, 2183, 2187, 2519  
 models  
     .... 2022, 2097, 2098, 2114, 2149, 2236,  
         2261, 2261, 2459, 2479, 2480, 2523,  
         2537, 2591, 2611, 2644  
 modernization  
     .... 2181, 2360, 2361, 2381, 2629  
 moisture content  
     .... 2290  
 monitoring  
     .... 2459  
 monoculture  
     .... 1989, 1992, 2012, 2013, 2015, 2016  
 moose  
     .... 2063  
 moshavim  
     .... 2184  
 motivation  
     .... 2337  
 mountains  
     .... 2085  
 mulching  
     .... 2034, 2086  
 mules  
     .... 2063  
 multidisciplinary research  
     .... 2285, 2354, 2473, 2485, 2526  
 multiple cropping  
     .... 1981, 1983, 1984, 1986, 1992, 1994,  
         2003, 2008, 2010, 2017, 2019, 2023,  
         2035, 2039, 2099, 2154, 2163, 2231,  
         2258, 2348, 2519, 2542, 2593  
 Multiple Cropping Project  
     .... 2586  
 multiple land use  
     .... 1951, 1972, 1986, 1994  
 multiple use  
     .... 2061  
 mung beans  
     .... 2164  
 mustard  
     .... 1980  
 multinational corperations  
     .... 2182  
 mycoses  
     .... 2124, 2125  
 natioanl planning  
     .... 2356  
 National Dairy Development Board  
     .... 2247  
 national planning  
     .... 2322, 2367, 2651  
 national programmes and projects  
     .... 1974, 1987, 2019, 2052, 2068, 2126,  
         2134, 2174, 2188, 2190, 2199, 2202,  
         2223, 2226, 2230, 2233, 2236, 2248,  
         2319, 2321, 2322, 2323, 2355, 2365,  
         2366, 2378, 2414, 2455, 2473, 2499,  
         2514, 2523, 2532, 2536, 2543, 2544,  
         2545, 2546, 2569, 2582, 2596, 2605,  
         2615, 2621, 2633, 2641, 2642, 2645,

national programmes and projects (con't)	nutrient availability
.... 2648, 2651, 2652, 2654, 2658, 2659,	.... 2165
2662, 2663, 2667	nutrients
native varieties	.... 2165
.... 2647, 2647	nutrition
natural enemies	.... 2048, 2052, 2074, 2124, 2125, 2135,
.... 2157, 2158, 2490	2217, 2220, 2221, 2263, 2308, 2309,
natural resources	2318, 2415, 2506, 2530
.... 2090, 2096, 2323, 2539	nutrition programmes
Nebraska	.... 2334, 2508
.... 2413	nutritional state
Nepal	.... 1964, 2220, 2221, 2259
.... 1987, 2180, 2262, 2346	nutritional surveys
networking	.... 2259
.... 2250, 2250	nutritional value
New England	.... 2141
.... 2325	nutritive ratio
new international economic order	.... 2141
.... 2252	oats
Nicaragua	.... 2061
.... 1975, 2187, 2444, 2606, 2616	objectives
Niger	.... 2080, 2337, 2366, 2462, 2469, 2499,
.... 2177	2536, 2536, 2597, 2603, 2605
Nigeria	occupations
.... 2015, 2103, 2199, 2223, 2232, 2300,	.... 1973
2315, 2362, 2658, 2662	off-farm employment
nitrogen	.... 1961, 1965, 1968, 1975, 2186, 2187,
.... 2027, 2097, 2165	2215, 2296, 2326, 2418, 2443, 2662
nitrogen fertilizers	oil plants
.... 2107	.... 2139, 2144
nitrogen fixation	okras
.... 2124, 2125, 2630	.... 2001, 2067
nitrogen response	on farm research
.... 2021	.... 2511, 2592, 2622
no tillage	on-farm research
.... 2106	.... 1961, 2062, 2159, 2274, 2380, 2455,
no-tillage systems	2477, 2484, 2576, 2598, 2599, 2623,
.... 1975	2631, 2633
nomenclature	on-farm testing
.... 2162	.... 1968, 2073, 2115, 2353, 2354, 2355,
non-farm income	2368, 2414, 2444, 2456, 2514, 2515,
.... 2296, 2418, 2662	2523, 2536, 2536, 2591, 2596, 2597,
non-marketing premiums	2600, 2601, 2602, 2604, 2607, 2615,
.... 2185	2621, 2642, 2647, 2647, 2654
non-optimizing methods	onions
.... 2294, 2467, 2527, 2545	.... 2001, 2522
non-renewable resources	operation on slopes
.... 2003, 2349	.... 2100
North Africa	operations
.... 2077, 2314	.... 2250, 2250
North Carolina	operations research
.... 2510	.... 2469, 2525, 2628
nurseries	opportunity costs
.... 2231	.... 2257

optimization  
     .... 2603  
 optimization methods  
     .... 2386, 2603  
 organic farming  
     .... 2082  
 organization  
     .... 2239, 2243  
 organization of research  
     .... 2347, 2347, 2493, 2500, 2525, 2584,  
         2622, 2630, 2631  
 organization of work  
     .... 2241, 2447, 2603  
 organization structure  
     .... 2611  
 organizational structures  
     .... 2194, 2229, 2233, 2239, 2241, 2246,  
         2248, 2260, 2268, 2271, 2272, 2316,  
         2541, 2633, 2634, 2639, 2641, 2646,  
         2648, 2652  
 organizations  
     .... 2240, 2247, 2254, 2667  
 oxen  
     .... 2063  
 oxisols  
     .... 2108  
 Pacific Islands  
     .... 2204  
 Pakistan  
     .... 2147, 2340, 2340, 2346, 2662  
 Panama  
     .... 2021, 2089, 2089, 2167, 2492, 2596,  
         2654  
 panicum maximum  
     .... 2086  
 Papua New Guinea  
     .... 2217, 2220, 2350  
 parasites  
     .... 2231, 2490  
 part time farming  
     .... 2210, 2443  
 participatory strategies  
     .... 1953, 1991, 2052, 2177, 2180, 2183,  
         2191, 2194, 2206, 2209, 2247, 2258,  
         2260, 2260, 2267, 2285, 2300, 2312,  
         2355, 2367, 2414, 2456, 2463, 2480,  
         2481, 2494, 2511, 2514, 2520, 2524,  
         2539, 2542, 2556, 2571, 2576, 2588,  
         2597, 2599, 2606, 2608, 2618, 2619,  
         2620, 2634, 2638, 2648, 2653, 2659,  
         2662  
 pastoral society  
     .... 2574  
 pastoralism  
     .... 2490, 2538, 2574  
 pasture management  
     .... 2257  
 pastures  
     .... 1961, 1965, 1967, 2047, 2095, 2105,  
         2257  
 pathogens  
     .... 2124, 2125, 2490  
 patterns  
     .... 2478  
 PCARR  
     .... 2230  
 peanuts  
     .... 2025, 2409  
 pearl millet  
     .... 1973, 2016, 2146  
 peasant farming  
     .... 2502  
 peasantry  
     .... 1953, 2178  
 percipitation  
     .... 2419  
 perennial  
     .... 1982  
 perennial cropping  
     .... 2014, 2599  
 performance indexes  
     .... 2337  
 performance testing  
     .... 2009, 2097, 2098, 2606  
 personnel  
     .... 2239, 2597  
 Peru  
     .... 1969, 2036, 2101, 2128, 2186, 2227,  
         2228, 2254, 2291, 2363, 2456, 2523,  
         2524, 2540, 2567, 2571, 2583, 2589,  
         2590, 2605, 2628, 2647, 2647, 2664  
 pest control  
     .... 1970, 1971, 2124, 2125, 2154, 2155,  
         2156, 2157, 2158, 2159, 2160, 2161  
 pest control methods  
     .... 2086, 2156, 2160, 2161  
 pests  
     .... 1971, 2124, 2125, 2154, 2157, 2158,  
         2498  
 Phaseolus vulgaris  
     .... 1958, 2012, 2013, 2124, 2125, 2133,  
         2154  
 pheromones  
     .... 2156  
 Philippines  
     .... 1991, 2022, 2026, 2035, 2093, 2114,  
         2131, 2180, 2191, 2205, 2206, 2230,

Philippines (con't)

- .... 2246, 2247, 2256, 2274, 2312, 2340, 2340, 2346, 2355, 2360, 2361, 2478, 2519, 2520, 2608
- phosphorus fertilizers
  - .... 2107
- photoperiod
  - .... 2098
- pig farming
  - .... 2043, 2046
- pig housing
  - .... 2231
- pigeon peas
  - .... 1973, 2016, 2027, 2116, 2138, 2430
- pigs
  - .... 1953, 1965, 1968, 1975, 2043, 2046, 2048, 2054, 2061, 2231, 2242
- pilot farms
  - .... 2251
- pilot projects
  - .... 2312, 2606, 2616
- Plan Pueblo
  - .... 2479
- planning
  - .... 2060, 2172, 2194, 2240, 2305, 2314, 2320, 2338, 2406, 2481, 2559, 2568, 2598, 2628
- planning of research
  - .... 1953, 2009, 2023, 2080, 2149, 2183, 2188, 2285, 2329, 2337, 2355, 2450, 2454, 2455, 2490, 2493, 2499, 2527, 2536, 2537, 2542, 2548, 2570, 2579, 2583, 2584, 2585, 2586, 2590, 2593, 2597, 2599, 2603, 2604, 2613, 2631, 2644, 2645, 2645, 2647, 2647, 2651, 2661, 2667
- planning research
  - .... 2525
- plant breeding
  - .... 2124, 2125, 2127, 2188, 2352, 2508, 2656
- plant density
  - .... 2132
- plant diseases
  - .... 1970, 1971, 2123
- plant indicators
  - .... 2085
- plant oils
  - .... 2139, 2144
- plant protection
  - .... 2123
- plant resources
  - .... 2096, 2538
- plantations
  - .... 2014
- planting date
  - .... 2022, 2025, 2035, 2154
- planting methods
  - .... 1961, 2018
- planting season
  - .... 2397, 2417, 2522
- planting site preparation
  - .... 2546
- plants
  - .... 2516
- plateaux
  - .... 2095
- ploughing
  - .... 2506
- PNIA
  - .... 2543
- policy
  - .... 2052, 2183, 2199, 2207, 2208, 2257, 2296, 2310, 2315, 2364, 2484, 2498, 2609, 2658
- policy making
  - .... 2501
- political participation
  - .... 2209
- political power
  - .... 2252, 2306, 2337
- political systems
  - .... 2306
- politics
  - .... 2306
- polyculture
  - .... 2012, 2013
- population
  - .... 2177, 2309
- population change
  - .... 2137
- population control
  - .... 2193
- population density
  - .... 1966, 2121, 2214
- population distribution
  - .... 2081, 2425
- population education
  - .... 2425
- population growth
  - .... 2174, 2198, 2237, 2299, 2309, 2425
- possibilities
  - .... 2041
- post harvest technology
  - .... 2523
- post-storage treatment
  - .... 2286

postharvest systems  
     .... 2590  
 postharvest losses  
     .... 2355, 2456  
 postharvest systems  
     .... 1959, 1988, 2285, 2291, 2524, 2647,  
         2647  
 potassium  
     .... 2511  
 potassium fertilizers  
     .... 2108  
 potato stores  
     .... 1974, 2286, 2523  
 potatoes  
     .... 1955, 1974, 1980, 1986, 1997, 2028,  
         2061, 2081, 2126, 2128, 2127, 2130,  
         2134, 2135, 2141, 2156, 2274, 2286,  
         2290, 2291, 2355, 2426, 2456, 2470,  
         2522, 2524, 2571, 2590, 2605, 2647,  
         2667  
 poultry  
     .... 1951, 1965, 2048, 2054, 2061  
 poultry farming  
     .... 2323  
 poverty  
     .... 2294, 2295, 2298, 2309, 2339, 2367,  
         2552  
 power source  
     .... 2063  
 practical education  
     .... 2174, 2218, 2268, 2271, 2272, 2396,  
         2618, 2635, 2650, 2653, 2655, 2664,  
         2665, 2666  
 precipitation  
     .... 2080, 2400, 2403, 2425  
 predators  
     .... 2490  
 Programa Andio de Desarrollo  
     .... 2341  
 price policy  
     .... 1974, 2224, 2237, 2289  
 price stabilization  
     .... 2311  
 price support  
     .... 2237, 2311  
 prices  
     .... 2431  
 principal component analysis  
     .... 2265  
 private farms  
     .... 1961  
 private forests  
     .... 2231  
 private plots  
     .... 2002, 2011, 2264, 2415  
 problem analysis  
     .... 2396  
 problem identification  
     .... 1953, 1955, 1969, 1971, 1972, 2009,  
         2052, 2062, 2068, 2075, 2076, 2079,  
         2082, 2103, 2105, 2123, 2129, 2174,  
         2177, 2181, 2182, 2186, 2187, 2198,  
         2204, 2209, 2211, 2212, 2224, 2232,  
         2237, 2250, 2250, 2253, 2254, 2255,  
         2258, 2259, 2274, 2286, 2293, 2294,  
         2295, 2297, 2299, 2300, 2314, 2319,  
         2320, 2328, 2330, 2331, 2337, 2338,  
         2339, 2340, 2340, 2342, 2361, 2362,  
         2370, 2378, 2383, 2384, 2388, 2394,  
         2396, 2398, 2402, 2403, 2406, 2417,  
         2421, 2425, 2427, 2428, 2436, 2437,  
         2451, 2462, 2463, 2465, 2468, 2469,  
         2470, 2477, 2485, 2489, 2491, 2493,  
         2494, 2499, 2501, 2504, 2504, 2506,  
         2507, 2509, 2512, 2513, 2516, 2525,  
         2530, 2536, 2536, 2540, 2544, 2547,  
         2549, 2550, 2553, 2555, 2558, 2560,  
         2561, 2565, 2566, 2569, 2571, 2574,  
         2584, 2588, 2590, 2596, 2597, 2604,  
         2607, 2609, 2617, 2620, 2621, 2622,  
         2623, 2633, 2636, 2637, 2638, 2646,  
         2659, 2660, 2661, 2662, 2660  
 processing  
     .... 2525, 2605  
 product storage  
     .... 2286  
 production  
     .... 1956, 1963, 2017, 2041, 2137, 2152,  
         2215, 2261, 2261, 2262, 2382, 2384,  
         2404, 2421, 2506  
 production analysis  
     .... 2087  
 production costs  
     .... 1953, 2006, 2028, 2130, 2354, 2384,  
         2388, 2385, 2391, 2392, 2394, 2398,  
         2402, 2403, 2404, 2405, 2416, 2419,  
         2420, 2421, 2424, 2426, 2427, 2470,  
         2476, 2503, 2509, 2522  
 production economics  
     .... 2405, 2419, 2442  
 production factors  
     .... 2411  
 production functions  
     .... 2104, 2152, 2479, 2595  
 production policy  
     .... 2245, 2260, 2299, 2332, 2448

production possibilities  
     .... 2201, 2314, 2382, 2423, 2506, 2510  
 production programs  
     .... 2242  
 production structure  
     .... 2629  
 production systems  
     .... 2502  
 productivity  
     .... 1968, 2404, 2498, 2506  
 professional services  
     .... 2243, 2272, 5460  
 profitability  
     .... 2287, 2353  
 profits  
     .... 2600  
 Programa Regional de Maiz  
     .... 2612  
 programmes and policies  
     .... 2245  
 programmes and projects  
     .... 1985, 1991, 2002, 2060, 2076, 2133,  
         2183, 2184, 2186, 2204, 2209, 2231,  
         2240, 2254, 2264, 2273, 2274, 2278,  
         2279, 2284, 2310, 2313, 2320, 2325,  
         2330, 2341, 2369, 2458, 2459, 2463,  
         2480, 2508, 2556, 2567, 2583, 2586,  
         2592, 2598, 2619, 2633, 2638, 2640,  
         2644, 2649  
 programming  
     .... 2628  
 project appraisal  
     .... 1980, 2194, 2209, 2211, 2240, 2250,  
         2250, 2258, 2263, 2274, 2293, 2295,  
         2300, 2304, 2308, 2312, 2340, 2340,  
         2453, 2463, 2467, 2514, 2527, 2543,  
         2545, 2553, 2558, 2637, 2642, 2645,  
         2645, 2647, 2654, 2667  
 projects  
     .... 1981, 2240, 2481, 2628  
 protein  
     .... 2134, 2137  
 protein analysis  
     .... 2133  
 protein intake  
     .... 2217  
 proteins  
     .... 2074, 2133  
 public finance  
     .... 2301  
 public health  
     .... 2218  
 public investment  
     .... 2301  
 public sector  
     .... 2193  
 publications  
     .... 2138, 2227, 2228, 2245, 2336, 2449  
 Pueblo Project  
     .... 2433, 2463, 2468, 2541, 2542, 2543  
 pulses  
     .... 1980  
 pumps  
     .... 2357  
 quails  
     .... 2054  
 qualitative methods  
     .... 2467, 2482, 2493, 2527, 2545, 2553  
 qualitative techniques  
     .... 2304  
 quality  
     .... 2525  
 quantitative analysis  
     .... 2560  
 rabbits  
     .... 2048, 2054, 2061  
 rain  
     .... 1961, 1966, 2083, 2093, 2098, 2116,  
         2419, 2435  
 rain biological production  
     .... 2403  
 rain forest  
     .... 2300  
 rain forests  
     .... 2007  
 rain-fed farming  
     .... 1991, 2022, 2026, 2073, 2107, 2114,  
         2131, 2153, 2353, 2593  
 random sampling  
     .... 2265, 2353, 2560  
 range management  
     .... 2095, 2273  
 rangelands  
     .... 2049, 2074  
 rapid methods  
     .... 2090  
 rapid rural appraisal  
     .... 2090, 2211, 2451, 2467, 2493, 2527,  
         2538, 2545, 2547, 2549, 2550, 2551,  
         2553, 2554, 2558, 2559, 2564, 2565,  
         2574, 2633, 2636, 2646  
 ratios  
     .... 2201  
 recommendations  
     .... 1961, 2261, 2261, 2380, 2562, 2562  
 recycling  
     .... 2323

red clover  
     .... 2005  
 reference works  
     .... 2138, 2162  
 regional agricultural policy  
     .... 2299, 2448  
 regional development  
     .... 2076, 2186, 2212, 2214, 2661  
 regional development  
     .... 2214  
 regional planning  
     .... 2007, 2179, 2212, 2213, 2277, 2300,  
         2320, 2478, 2512  
 regional policy  
     .... 2076, 2186, 2212, 2296  
 regions  
     .... 2626  
 regression  
     .... 2219  
 regression analysis  
     .... 1958, 2357, 2445  
 reindeer  
     .... 2063  
 reinforcements  
     .... 2587  
 relay cropping  
     .... 2019, 2024  
 reports  
     .... 1987, 1990, 2126, 2180, 2225, 2239,  
         2240, 2245, 2250, 2250, 2273, 2336,  
         2363, 2451, 2475, 2486, 2492, 2597  
 representative sampling  
     .... 2277  
 requirements  
     .... 2244  
 research  
     .... 1983, 1984, 2000, 2021, 2037, 2064,  
         2124, 2125, 2133, 2136, 2145, 2180,  
         2197, 2224, 2225, 2226, 2237, 2250,  
         2250, 2264, 2301, 2339, 2347, 2347,  
         2365, 2384, 2385, 2386, 2389, 2408,  
         2428, 2469, 2478, 2490, 2507, 2515,  
         2516, 2525, 2530, 2532, 2541, 2585,  
         2603, 2622, 2626, 5460  
 research centres  
     .... 2124, 2125, 2126, 2226, 2230, 2251,  
         2660  
 research contracts  
     .... 2660  
 research institutes  
     .... 1983, 1984, 2014, 2041, 2073, 2124,  
         2125, 2126, 2127, 2134, 2135, 2149,  
         2183, 2225, 2226, 2229, 2230, 2236,  
         2238, 2239, 2240, 2242, 2243, 2245,  
         research institutes (con't)  
             .... 2249, 2251, 2254, 2256, 2302, 2323,  
                 2324, 2337, 2355, 2361, 2407, 2456,  
                 2473, 2498, 2500, 2508, 2526, 2590,  
                 2621, 2638, 2640, 2641, 2644, 2658,  
                 2660  
 research organization  
     .... 2183, 2316, 2578, 2593, 2605, 2632,  
         2656, 2663  
 research policy  
     .... 2023, 2095, 2126, 2197, 2285, 2301,  
         2302, 2333, 2337, 2509, 2542, 2586,  
         2632, 2644, 2656, 2660  
 research projects  
     .... 1953, 1985, 2060, 2134, 2250, 2250,  
         2294, 2295, 2308, 2462, 2545, 2557,  
         2613, 2631  
 research teams  
     .... 2249, 2493, 2523, 2525, 2561, 2590,  
         2646  
 research workers  
     .... 2294, 2295, 2542, 2605  
 resource allocation  
     .... 1956, 1980, 2206, 2255, 2260, 2260,  
         2307, 2313, 2334, 2448  
 resource base  
     .... 2438, 2601, 2602  
 resource conservation  
     .... 1969, 2039, 2519  
 resource development  
     .... 1969, 2510  
 resource management  
     .... 1969, 2039, 2095, 2307, 2453, 2479  
 resource utilization  
     .... 2349, 2519  
 resources  
     .... 2238, 2423, 2510  
 resowing  
     .... 2001, 2394  
 respiration  
     .... 2097  
 retraining of farmers  
     .... 2396  
 returns  
     .... 2029, 2153, 2390, 2430  
 rice  
     .... 1952, 1953, 1965, 1972, 1980, 1986,  
         1991, 1994, 2000, 2007, 2008, 2009,  
         2014, 2019, 2021, 2022, 2035, 2036,  
         2083, 2089, 2093, 2097, 2098, 2099,  
         2103, 2113, 2114, 2127, 2131, 2145,  
         2147, 2149, 2163, 2165, 2178, 2179,  
         2198, 2205, 2216, 2222, 2224, 2237,  
         2242, 2256, 2262, 2293, 2304, 2340,

rice (con't)  
     .... 2340, 2347, 2347, 2354, 2356, 2357,  
         2360, 2361, 2381, 2390, 2416, 2419,  
         2420, 2421, 2422, 2424, 2436, 2448,  
         2484, 2503, 2519, 2531, 2575, 2593,  
         2594, 2605, 2608  
 rice intercropping  
     .... 2026  
 rice production  
     .... 2021, 2340, 2340  
 risk  
     .... 1961  
 risks  
     .... 1970, 1971, 2029, 2086, 2353, 2381,  
         2430, 2431, 2432, 2435, 2436, 2437,  
         2439, 2440, 2441, 2445, 2556, 2667  
 road transport  
     .... 2187  
 roads  
     .... 2172, 2179, 2212, 2213  
 ROCAP  
     .... 2089  
 Rockefeller Foundation  
     .... 2632, 2656  
 role conflicts  
     .... 5460  
 rotations  
     .... 1961, 2001, 2036, 2067, 2089, 2123,  
         2404  
 row intercropping  
     .... 1999, 2014  
 row orientation  
     .... 2018  
 row spacing  
     .... 2005, 2018, 2027, 2132, 2594  
 row tillage  
     .... 2005  
 rubber  
     .... 2007  
 ruling classes  
     .... 2545  
 ruminants  
     .... 2041, 2065, 2066, 2074, 2078, 2583  
 runoff  
     .... 2100, 2116  
 runoff collection  
     .... 2080  
 runoff control  
     .... 2100  
 rural areas  
     .... 2219, 2339, 2350, 2535  
 rural communities  
     .... 2212, 2350, 2535, 2564  
 rural development  
     .... 1969, 1978, 2002, 2004, 2004, 2040,  
         2052, 2090, 2096, 2176, 2179, 2180,  
         2184, 2188, 2191, 2194, 2198, 2199,  
         2202, 2204, 2210, 2211, 2212, 2222,  
         2235, 2247, 2252, 2255, 2260, 2260,  
         2263, 2273, 2275, 2277, 2294, 2295,  
         2296, 2300, 2306, 2309, 2310, 2313,  
         2315, 2320, 2321, 2328, 2329, 2330,  
         2339, 2350, 2360, 2367, 2374, 2378,  
         2387, 2418, 2451, 2458, 2468, 2475,  
         2507, 2512, 2513, 2520, 2524, 2527,  
         2528, 2538, 2545, 2547, 2551, 2552,  
         2553, 2559, 2565, 2568, 2583, 2598,  
         2636, 2645, 2645, 2648, 2660  
 Rural Development Participation Project  
     .... 2180  
 Rural Development Plan  
     .... 2578, 2632  
 rural development tourism  
     .... 2552, 2565, 2636  
 rural economy  
     .... 2329  
 rural industry  
     .... 2315, 2374  
 rural planning  
     .... 2535, 2567, 2628  
 rural population  
     .... 2218, 2367  
 rural settlement  
     .... 2179, 2212  
 rural sociology  
     .... 1957, 2535  
 rural urban migration  
     .... 1970  
 rural urban relations  
     .... 2294, 2295, 2545  
 rural women  
     .... 2374, 2443, 2448  
 Rwanda  
     .... 2135  
 Sahel  
     .... 2177  
 sampling  
     .... 1999, 2122, 2258, 2459, 2501  
 sampling techniques  
     .... 2277, 2459, 2501, 2560  
 SAT  
     .... 1964  
 savannas  
     .... 2049, 2300, 2657  
 scientists  
     .... 2373, 5460

seasonal fluctuations  
     .... 2289  
 seasonal labour  
     .... 2447  
 seasonal variation  
     .... 1999, 2016  
 seasonality  
     .... 2220, 2345  
 seasons  
     .... 2497  
 seed bed preparation  
     .... 2028, 2533  
 Seed Certification  
     .... 2389  
 seed crops  
     .... 2352, 2656  
 seed moisture  
     .... 2290  
 seed production  
     .... 1974, 2137, 2137, 2286, 2352, 2400,  
         2605, 2656  
 seed storage  
     .... 2286, 2290  
 seed testing  
     .... 2389  
 seeds  
     .... 1988, 2127, 2148, 2290, 2352, 2388,  
         2508, 2656  
 self sufficiency  
     .... 2260, 2260, 2362  
 semi-arid zones  
     .... 1999, 2016, 2120, 2447, 2600  
 semiarid climates  
     .... 2353  
 semiarid zones  
     .... 1956, 1973, 2027, 2116, 2121, 2146,  
         2308, 2430, 2445, 2574  
 Senegal  
     .... 2177, 2180  
 SERA  
     .... 2087, 2506, 2587, 2612  
 sesame  
     .... 1953, 1971, 1972, 2391, 2392, 2416,  
         2424, 2503, 2522  
 settlement  
     .... 1965, 2007, 2211, 2213  
 settlement patterns  
     .... 2007, 2179, 2478  
 share cropping  
     .... 2438, 2474  
 sheep  
     .... 2048, 2052, 2054, 2056, 2057, 2063,  
         2073, 2077, 2078, 2583  
 sheep farming  
     .... 2057, 2583  
 shifting cultivation  
     .... 1952, 1965, 1988, 1992, 2007, 2056,  
         2179, 2189  
 Sierra Leone  
     .... 2575  
 Simmondsia chinensis  
     .... 2139, 2144  
 simulation models  
     .... 2022, 2116, 2177  
 site classification  
     .... 2093, 2622  
 site factors  
     .... 2622  
 skilled labour  
     .... 2243  
 slash  
     .... 2179  
 slope  
     .... 2093  
 slopes  
     .... 2100  
 sloping land  
     .... 1967, 1968, 2095  
 small businesses  
     .... 2288  
 small bussiness  
     .... 2328  
 Small Farm Development Corporation  
     .... 2184  
 Small Farm Managment Assistance Program  
     .... 2325  
 Small Farm Production Systems Project  
     .... 2606, 2616  
 small farmers  
     .... 1994, 2342, 2400, 2405, 2470, 2471,  
         2497  
 small farms  
     .... 1952, 1953, 1958, 1961, 1962, 1963,  
         1964, 1968, 1969, 1972, 1973, 1983,  
         1984, 1992, 1993, 1996, 2008, 2010,  
         2014, 2016, 2034, 2039, 2044, 2046,  
         2048, 2054, 2056, 2057, 2060, 2062,  
         2063, 2065, 2066, 2067, 2068, 2069,  
         2070, 2071, 2072, 2075, 2078, 2086,  
         2095, 2100, 2103, 2141, 2152, 2159,  
         2173, 2174, 2181, 2183, 2184, 2185,  
         2186, 2187, 2189, 2191, 2195, 2197,  
         2199, 2201, 2207, 2208, 2210, 2215,  
         2216, 2217, 2220, 2223, 2225, 2231,  
         2232, 2235, 2236, 2250, 2250, 2262,  
         2264, 2272, 2274, 2278, 2283, 2285,  
         2286, 2298, 2302, 2305, 2308, 2309,

small farms (con't)  
     .... 2321, 2323, 2325, 2328, 2337, 2338,  
         2340, 2340, 2346, 2356, 2358, 2359,  
         2362, 2372, 2373, 2375, 2376, 2377,  
         2381, 2382, 2384, 2385, 2386, 2394,  
         2396, 2401, 2402, 2406, 2408, 2411,  
         2413, 2414, 2415, 2418, 2419, 2425,  
         2427, 2431, 2434, 2438, 2439, 2443,  
         2444, 2445, 2446, 2453, 2454, 2456,  
         2460, 2464, 2465, 2466, 2468, 2473,  
         2475, 2476, 2477, 2478, 2481, 2485,  
         2491, 2493, 2494, 2503, 2509, 2511,  
         2525, 2531, 2532, 2533, 2536, 2536,  
         2541, 2542, 2544, 2548, 2556, 2576,  
         2577, 2578, 2579, 2584, 2585, 2586,  
         2590, 2592, 2593, 2598, 2599, 2603,  
         2608, 2613, 2618, 2619, 2620, 2629,  
         2636, 2641, 2642, 2646, 2647, 2647,  
         2656, 2661, 2662, 2663, 2667  
 small ruminants  
     .... 2044  
 social anthropology  
     .... 2189, 2200, 2214, 2498, 2551, 2590,  
         2618, 2661  
 social benefits  
     .... 2283  
 social change  
     .... 2178, 2182, 2186, 2209, 2210, 2217,  
         2334, 2338, 2367, 2381, 2614, 5460  
 social classes  
     .... 2262  
 social customs  
     .... 2052, 2141  
 social development  
     .... 2260, 2260, 2334  
 social institutions  
     .... 2198, 2247  
 social policy  
     .... 2312  
 social science  
     .... 2454, 2526  
 social sciences  
     .... 1980, 2126, 2227, 2228, 2304, 2329,  
         2453, 2494, 2520, 2528, 2541, 2577,  
         2661, 2664  
 social scientists  
     .... 2455, 2465, 2524, 2540, 2542  
 social stratification  
     .... 2196, 2252, 2262, 2361, 2545  
 social structure  
     .... 1964, 2100, 2103, 2183, 2200, 2214,  
         2262, 2283, 2498, 2541, 2583  
 social structures  
     .... 2277  
 social systems  
     .... 2070, 2183, 2490, 2498  
 societies  
     .... 2192  
 socio-economic analysis  
     .... 2037, 2073, 2242, 2397, 2468, 2573  
 socio-economic conditions  
     .... 1984  
 socio-economic constraints  
     .... 1966, 1970, 1971, 1973, 2103, 2362,  
         2468, 2509, 2515, 2597, 2600, 2610,  
         2615, 2624, 2658  
 socio-economic organization  
     .... 1957, 1985, 1988, 2002, 2004, 2004,  
         2023, 2100, 2178, 2179, 2181, 2185,  
         2186, 2187, 2191, 2195, 2196, 2197,  
         2201, 2205, 2206, 2209, 2210, 2258,  
         2260, 2263, 2277, 2283, 2326, 2334,  
         2353, 2381, 2387, 2390, 2441, 2453,  
         2466, 2499, 2500, 2528, 2575, 2576,  
         2578, 2583, 2584, 2613  
 socioeconomic projects  
     .... 2238  
 Socioeconomic Rural  
     .... 2471  
 socio-economic status  
     .... 1951, 1952, 1955, 1972, 1985, 2001,  
         2067, 2075, 2081, 2129, 2177, 2236,  
         2238, 2262, 2381, 2390, 2391, 2392,  
         2393, 2394, 2395, 2399, 2401, 2411,  
         2413, 2416, 2423, 2424, 2428, 2429,  
         2476, 2503, 2506, 2516, 2522, 2528,  
         2532, 2552, 2564, 2563, 2591, 2609  
 socio-economic studies  
     .... 1983  
 socio-economics  
     .... 2136, 2383, 2389, 2400, 2404, 2421,  
         2533  
 sociological analysis  
     .... 1957, 2004, 2004, 2052, 2126, 2183,  
         2185, 2191, 2197, 2200, 2268, 2270,  
         2271, 2272, 2277, 2324, 2334, 2337,  
         2338, 2346, 2454, 2456, 2466, 2468,  
         2471, 2474, 2498, 2510, 2524, 2535,  
         2540, 2541, 2566, 2584, 2611, 2620,  
         2636, 2661  
 sociological method  
     .... 2467, 2527, 2545  
 soil  
     .... 2099, 2167  
 soil analysis  
     .... 2036, 2090, 2101, 2102  
 soil classification  
     .... 2095, 2509, 2613

soil colour  
     .... 2096  
 soil conservation  
     .... 1973, 2101  
 soil cultivation  
     .... 1984, 2087, 2101, 2397, 2425, 2506  
 soil degradation  
     .... 2056  
 soil erosion  
     .... 1968  
 soil fertility  
     .... 1966, 1969, 2007, 2021, 2036, 2101,  
         2108, 2509, 2539, 2546  
 soil management  
     .... 1969, 2147, 2196  
 soil moisture  
     .... 2080, 2114  
 soil preparation  
     .... 1951, 2006, 2081, 2397, 2426, 2470,  
         2563, 2587  
 soil preparations  
     .... 1986  
 soil profiles  
     .... 2085  
 soil resources  
     .... 2096  
 soil science  
     .... 2203, 2222  
 soil structure  
     .... 2039, 2081  
 soil testing  
     .... 2036  
 soil texture  
     .... 2093, 2101  
 soil treatments  
     .... 2123  
 soil types  
     .... 1984, 2036, 2068, 2079, 2093, 2423  
 soil water  
     .... 2117  
 soil water movement  
     .... 2098  
 soil water retention  
     .... 2016, 2079  
 soils  
     .... 1952, 1966, 1983, 1984, 2036, 2067,  
         2081, 2090, 2101, 2108, 2112, 2112,  
         2405, 2423, 2430, 2498, 2502, 2506,  
         2509  
 solanum  
     .... 2126  
 solar energy  
     .... 2003  
 solar radiation  
     .... 2098  
 sole cropping  
     .... 2016  
 solution design  
     .... 1970, 1971, 2123, 2259, 2373, 2489,  
         2499, 2509, 2515, 2546, 2597, 2601,  
         2602, 2615, 2645, 2645  
 Somalia  
     .... 2547  
 sondeo  
     .... 1951, 1955, 1958, 1961, 2001, 2068,  
         2081, 2094, 2236, 2286, 2383, 2397,  
         2411, 2493, 2497, 2522, 2532, 2561,  
         2562, 2563, 2568, 2573, 2636  
 sorghum  
     .... 1956, 1966, 1970, 1971, 1973, 1975,  
         1988, 2016, 2021, 2027, 2029, 2079,  
         2103, 2107, 2127, 2146, 2177, 2219,  
         2242, 2250, 2250, 2265, 2338, 2352,  
         2356, 2362, 2385, 2390, 2392, 2409,  
         2419, 2421, 2430, 2448, 2522, 2530,  
         2632, 2656  
 Sorghum Program  
     .... 2530  
 South America  
     .... 2085  
 South Carolina  
     .... 2382  
 Southeast Asia  
     .... 1992, 2304  
 southeastern states of USA  
     .... 2184  
 Southern Africa  
     .... 2418, 2558  
 Southern Development Foundation  
     .... 2184  
 sowing  
     .... 1951, 2001, 2081, 2087, 2129, 2388,  
         2394, 2397, 2425, 2426, 2470, 2506,  
         2587  
 sowing date  
     .... 1984, 1996, 2028, 2116, 2397, 2522  
 sowing methods  
     .... 1961, 1984, 1986, 1993, 1996, 1997,  
         2006, 2028, 2084, 2094, 2497, 2529,  
         2563, 2580, 2581  
 soyabeans  
     .... 2018, 2018, 2019, 2429, 2511  
 soybeans  
     .... 2409  
 spacing  
     .... 2027, 2132

Spain  
 .... 2541  
 spodoptera frugiperda  
 .... 2154  
 sprinkler irrigation  
 .... 2117  
 squashes  
 .... 1963, 2061  
 SR-CRSP  
 .... 2583  
 Sri Lanka  
 .... 2180, 2247, 2349, 2535, 2558, 2559,  
 2565  
 stand density  
 .... 2083  
 statistical analysis  
 .... 1957, 1958, 2016, 2103, 2110, 2122,  
 2132, 2149, 2166, 2217, 2219, 2258,  
 2265, 2357, 2402, 2410, 2436, 2437,  
 2445, 2455, 2511, 2560, 2566  
 statistical methods  
 .... 2560, 2566, 2594  
 status  
 .... 2413  
 steers  
 .... 2440  
 stocking rate  
 .... 2257  
 storage  
 .... 2126, 2286, 2291, 2524, 2605  
 storage losses  
 .... 2590  
 stored product pests  
 .... 2124, 2125  
 straw  
 .... 2073  
 structural change  
 .... 2255, 2260, 2338, 2394  
 structural policy  
 .... 2260, 2260  
 study sites  
 .... 2631  
 subsistence agriculture  
 .... 2189  
 subsistence farming  
 .... 2014, 2095, 2179, 2220, 2349, 2435,  
 2502, 2645, 2645  
 subtropics  
 .... 1952, 2112, 2112, 2157  
 Sudan  
 .... 1960, 1970, 1971, 2558, 2569  
 sugar  
 .... 2094  
 sugarcane  
 .... 1968, 2019  
 supply  
 .... 2402  
 supply functions  
 .... 2379  
 surpluses  
 .... 2185  
 surveys  
 .... 1958, 1966, 1968, 1970, 1971, 1975,  
 2090, 2217, 2277, 2300, 2455, 2469,  
 2509, 2547, 2549, 2550, 2555, 2562,  
 2562, 2565, 2570, 2572, 2575, 2609,  
 2623  
 surveys, long-term  
 .... 1962, 2072, 2073, 2293, 2353, 2385  
 surveys, short-term  
 .... 1953, 1956, 1959, 1965, 1988, 2042,  
 2052, 2068, 2089, 2226, 2250, 2250,  
 2366, 2389, 2397, 2466, 2491, 2493,  
 2514, 2530, 2533, 2540, 2548, 2551,  
 2557, 2559, 2561, 2562, 2568, 2571,  
 2574, 2579, 2585, 2596, 2607, 2621,  
 2623, 2647, 2647, 2667  
 Swaziland  
 .... 2418  
 sweet potatoes  
 .... 2019  
 swine diseases  
 .... 2231  
 Syria  
 .... 2073, 2077  
 systems  
 .... 1951, 1993, 2057, 2512, 2625  
 systems analysis  
 .... 1985, 2071, 2201, 2255, 2293, 2466,  
 2489, 2489, 2490, 2614, 2626, 2627  
 Taiwan  
 .... 2019, 2190, 2418  
 tank irrigation  
 .... 2192  
 tanks  
 .... 2120, 2121  
 Tanzania  
 .... 1958, 2052, 2110, 2176, 2180, 2211,  
 2320, 2435, 2439, 2464  
 target groups  
 .... 2561  
 target selection  
 .... 1965, 2068, 2226, 2259, 2414, 2477,  
 2478, 2514, 2515, 2536, 2536, 2596,  
 2601, 2602, 2604, 2607, 2610, 2615,  
 2621

taxes  
     .... 2402  
 tea  
     .... 2186  
 teacher training  
     .... 2653  
 technical aid  
     .... 2275, 2276, 2374, 2588  
 technical change  
     .... 2257  
 technical process  
     .... 2302  
 technical progress  
     .... 2120, 2130, 2178, 2215, 2230, 2253,  
         2316, 2367, 2484, 2500, 2534, 2544,  
         2588, 2590  
 technical training  
     .... 2215, 2243, 2322, 2632  
 technicians  
     .... 2373  
 techniques  
     .... 2243, 2251, 2423, 2525, 2622, 2626  
 technology  
     .... 1955, 2000, 2001, 2028, 2075, 2087,  
         2124, 2125, 2129, 2137, 2145, 2149,  
         2195, 2199, 2230, 2234, 2235, 2236,  
         2243, 2253, 2254, 2255, 2257, 2259,  
         2286, 2302, 2316, 2337, 2338, 2339,  
         2342, 2360, 2361, 2365, 2371, 2375,  
         2376, 2383, 2384, 2385, 2388, 2391,  
         2392, 2393, 2394, 2397, 2398, 2400,  
         2402, 2403, 2404, 2405, 2416, 2417,  
         2419, 2421, 2422, 2424, 2425, 2426,  
         2427, 2430, 2431, 2433, 2437, 2457,  
         2470, 2471, 2476, 2477, 2483, 2491,  
         2501, 2502, 2503, 2515, 2521, 2525,  
         2531, 2532, 2533, 2534, 2544, 2545,  
         2561, 2567, 2584, 2585, 2586, 2591,  
         2600, 2603, 2608, 2609, 2610, 2621,  
         2631, 2644  
 technology analysis  
     .... 1990, 1996, 2017, 2084, 2089, 2152,  
         2198, 2215, 2225, 2251, 2341, 2345,  
         2356, 2363, 2376, 2377, 2383, 2389,  
         2390, 2393, 2399, 2401, 2411, 2419,  
         2429, 2431, 2437, 2447, 2471, 2491,  
         2492, 2497, 2506, 2512, 2529, 2531,  
         2532, 2533, 2536, 2548, 2567, 2579,  
         2580, 2581, 2582, 2585, 2589, 2590,  
         2595, 2597, 2609, 2612, 2617, 2624,  
         2663  
 technology development  
     .... 2623  
 technology transfer  
     .... 2242, 2589  
 technology transfers  
     .... 1968, 1980, 1987, 2006, 2056, 2060,  
         2075, 2079, 2103, 2124, 2125, 2136,  
         2148, 2152, 2177, 2182, 2188, 2191,  
         2197, 2206, 2214, 2216, 2235, 2252,  
         2254, 2255, 2260, 2263, 2267, 2270,  
         2274, 2283, 2293, 2299, 2302, 2308,  
         2316, 2319, 2324, 2339, 2342, 2353,  
         2355, 2356, 2358, 2359, 2360, 2361,  
         2362, 2363, 2364, 2371, 2374, 2377,  
         2378, 2382, 2383, 2385, 2389, 2395,  
         2402, 2411, 2419, 2436, 2437, 2461,  
         2463, 2471, 2475, 2476, 2492, 2498,  
         2509, 2514, 2515, 2518, 2519, 2523,  
         2524, 2529, 2531, 2533, 2534, 2557,  
         2558, 2562, 2562, 2567, 2572, 2578,  
         2580, 2581, 2582, 2584, 2588, 2590,  
         2605, 2610, 2612, 2613, 2616, 2617,  
         2620, 2621, 2629, 2647, 2647, 2653,  
         2656, 2660  
 technology-Validacion Project  
     .... 2606  
 temperate zones  
     .... 2630  
 temperatures  
     .... 2098, 2113  
 tenancy  
     .... 2445  
 tenure systems  
     .... 1964, 1968, 1975, 2205, 2384  
 terminology  
     .... 2162, 2625  
 terraces  
     .... 2100  
 testing  
     .... 2041, 2137, 2478  
 tests  
     .... 2099  
 Thailand  
     .... 2007, 2216, 2247, 2340, 2340, 2346,  
         2357, 2436, 2586, 2662  
 threshing  
     .... 2345, 2354  
 tillage  
     .... 1961, 2005, 2034, 2516, 2576  
 tillage systems  
     .... 2080  
 time series  
     .... 2353  
 timeliness  
     .... 2555

tobacco  
.... 1968, 1968, 2001, 2019, 2067, 2265, 2522

tomatoes  
.... 2001, 2067, 2086, 2123

topography  
.... 1961, 1983, 1984, 2095, 2258, 2425

traction  
.... 1956, 2061, 2067, 2563

tractors  
.... 2357

trade policy  
.... 2245, 2311

traditional farming  
.... 1964, 1992, 1999, 2015, 2017, 2068, 2071, 2100, 2216, 2377, 2436, 2502, 2600

training  
.... 2126, 2174, 2193, 2218, 2222, 2226, 2242, 2260, 2266, 2268, 2269, 2271, 2272, 2275, 2276, 2315, 2322, 2354, 2407, 2468, 2508, 2536, 2536, 2605, 2607, 2616, 2618, 2632, 2635, 2638, 2640, 2643, 2647, 2647, 2650, 2652, 2653, 2655, 2666, 2667

training centres  
.... 2664, 2665

transformations  
.... 2216

transplanting  
.... 2097

tree cropping  
.... 1992, 2071

tree intercropping  
.... 1992

trials  
.... 2005, 2022, 2110, 2168, 2354, 2431, 2525, 2599, 2618

Trinidad & Tobago  
.... 2386

triticale  
.... 2623

tropical forests  
.... 2038, 2056, 2057, 2213, 2214

tropical soils  
.... 2109

tropics  
.... 1969, 1973, 1989, 1992, 1998, 2002, 2010, 2012, 2013, 2014, 2016, 2023, 2034, 2037, 2047, 2057, 2062, 2063, 2085, 2095, 2116, 2120, 2121, 2130, 2146, 2154, 2159, 2189, 2232, 2257, 2293, 2305, 2326, 2347, 2347, 2361, 2386, 2430, 2445, 2483, 2498, 2597,

tropics (con't)  
.... 2613, 2629, 2630

true seeds  
.... 2130

tubers  
.... 2014, 2127, 2130, 2141

Tunisia  
.... 2180, 2216, 2436

Turkey  
.... 2588

ultisols  
.... 2108

uncertainties  
.... 2381, 2431

universities  
.... 2649, 2660

university research  
.... 2660

upgrading  
.... 2385

upland areas  
.... 2026

upland rice  
.... 2196

Upper Volta  
.... 1956, 1966, 2072, 2177, 2195

urban areas  
.... 2219

USA  
.... 1957, 1962, 1963, 2025, 2042, 2043, 2105, 2122, 2150, 2173, 2184, 2208, 2231, 2264, 2297, 2325, 2338, 2382, 2396, 2402, 2409, 2413, 2434, 2443, 2510

USAID  
.... 2348, 2569

USAID Multiple Cropping Project  
.... 2250, 2250

utilization  
.... 1974

value systems  
.... 2182, 5460

variety trials  
.... 2150, 2514, 2594

vegetable crops  
.... 1992, 2019, 2261, 2261

vegetables  
.... 1951, 1963, 1975, 1981, 1993, 1994, 2001, 2011, 2081, 2123, 2184, 2231, 2242, 2264, 2393, 2400

vegetation types  
.... 2085

Venezuela  
.... 2254, 2363, 2567, 2589, 2628, 2662

vertisols  
     .... 1961, 1999, 2079, 2080, 2107, 2364, 2600  
 veterinary services  
     .... 2050  
 village marketing  
     .... 1970, 1971  
 villages  
     .... 1958, 1966, 2349, 2432, 2438  
 viruses  
     .... 2124, 2125  
 VLS  
     .... 1964, 1973, 1999, 2016, 2079, 2189, 2198, 2199, 2217, 2219, 2345, 2360, 2362, 2381, 2430, 2432, 2438, 2440, 2441, 2445, 2447, 2459, 2500, 2600, 2633  
 vocational training  
     .... 2315  
 wage rates  
     .... 2446  
 wages  
     .... 1966  
 WARDA  
     .... 2127, 2324, 2356  
 waste utilization  
     .... 2370  
 wastes  
     .... 2370  
 water  
     .... 2068  
 water availability  
     .... 1970, 1971  
 water balance  
     .... 2114  
 water buffaloes  
     .... 2053  
 water conservation  
     .... 1973, 2086, 2435  
 water erosion  
     .... 2007  
 water harvesting  
     .... 2116  
 water management  
     .... 1966, 2117, 2261, 2261, 2357  
 water power  
     .... 2003  
 water requirements  
     .... 2086  
 water resources  
     .... 1999, 2023  
 water use  
     .... 2117, 2122  
 waterlogging  
     .... 1961  
 watermelons  
     .... 1953, 1963, 2001, 2409  
 watershed management  
     .... 2112, 2112, 2600  
 watersheds  
     .... 1999, 2080, 2115, 2364  
 weather patterns  
     .... 2083  
 weed control  
     .... 2001, 2005, 2021, 2034, 2083, 2084, 2089, 2106, 2163, 2164, 2165, 2417, 2529, 2596  
 weed utilization  
     .... 2061, 2155, 2160, 2161  
 weeding  
     .... 2083, 2089, 2546  
 weeds  
     .... 2089, 2155, 2160, 2161, 2162, 2163, 2165, 2516  
 wells  
     .... 2115  
 West Africa  
     .... 2177, 2195, 2299, 2513, 2538, 2657, 2658  
 Western Sudan Agricultural Research Proj  
     .... 2569  
 wheat  
     .... 1955, 1973, 1980, 1996, 1997, 2006, 2103, 2188, 2216, 2242, 2256, 2311, 2353, 2394, 2398, 2400, 2401, 2403, 2404, 2405, 2409, 2417, 2426, 2427, 2436, 2470, 2484, 2533, 2580, 2588, 2605, 2662, 2665  
 wildlife conservation  
     .... 2049  
 wind effects  
     .... 2403  
 Winrock  
     .... 2062  
 women in agriculture  
     .... 2354  
 women in development  
     .... 2135, 2180, 2374  
 wood chips  
     .... 2186  
 work norms  
     .... 2244  
 work planning  
     .... 2241, 2244, 2603  
 work teams  
     .... 2373, 2603

working animals  
.... 2040, 2045, 2053, 2066  
working plans  
.... 2241  
World Bank  
.... 2260, 2324  
world markets  
.... 2257  
WSARP  
.... 2045  
yak  
.... 2063  
yams  
.... 2086  
Yemen  
.... 2180  
yersinia pestis  
.... 2522  
yield  
.... 1965  
yield components  
.... 2151  
yield factor  
.... 2132  
yield gap  
.... 2595, 2605  
yield increases  
.... 2116, 2237, 2484, 2508, 2519, 2594,  
2600  
yield response functions  
.... 2022, 2104, 2107, 2165  
yields  
.... 1951, 1974, 1997, 2001, 2005, 2012,  
2013, 2018, 2022, 2036, 2077, 2081,  
2087, 2106, 2110, 2114, 2123, 2132,  
2137, 2137, 2152, 2164, 2185, 2224,  
2348, 2394, 2397, 2412, 2417, 2422,  
2425, 2428, 2430, 2470, 2476, 2502,  
2518, 2587, 2595  
yields on farm research  
.... 2431  
yucca  
.... 1953, 1965  
Zaire  
.... 2289  
Zambia  
.... 2464, 2466, 2546, 2651, 2652  
Zea mays  
.... 2012, 2013, 2025, 2104, 2154  
Zebu cattle  
.... 2047

## TITLE INDEX

ADAPTIVE AGRICULTURAL RESEARCH ON SMALL SCALE CA	2354
ADAPTIVE FIELD-TESTING FOR RURAL DEVELOPMENT PRO	2598
ADJUSTMENT TO CLIMATIC VARIABILITY IN SELF PROVI	2435
ADOPCION DE SEMILLAS MEJORADAS GENERADAS POR EL	2389
ADOPTION OF RECOMMENDED MULTIPLE-CROPPING PRACTI	2258
AGRARIAN ECOLOGY. IN: Agrarian Ecology.	2203
AGRICULTURAL DEVELOPMENT IN SAHELIAN W. AFRICA.	2177
AGRICULTURAL EXTENSION: THE TRAINING AND VISIT S	2266
AGRICULTURAL RESEARCH AND THIRD WORLD FOOD PRODU	2324
AGRICULTURAL RESEARCH IN GUATEMALA. (Paper prese	2233
AGRICULTURAL RESEARCH PROJECT II: REPORT OF MAY	1980
AGRICULTURAL SUCCESS AND FAILURE AMONG TRANSAMAZ	2179
AGRO-ECONOMIC PROFILES OF SELECTED VILLAGES IN A	1964
AGROECONOMIC PROFILE OF SELECTED VILLAGES IN SHO	2079
AGROECOSYSTEMS DETERMINANTS. (Paper presented at	2490
AGRONOMISTS AND AG ECONOMISTS: CAN'T WE BE PARTN	2472
AGROVILA/ON THE TRANSAMAZONICA HYGHWAY IN BRAZIL	2212
AIA: UN MODELO CONCEPTUAL, INTERDISCIPLINARIO, D	2523, 2617
AID EXPERIENCE IN AGRICULTURAL RESEARCH: A REVIE	2642
AIMING AGRICULTURAL RESEARCH AT THE NEEDS OF FAR	2544, 2621
ALCANSE GEOGRAFICO DE LOS SISTEMAS DE CULTIVO EN	2423
ALGUNAS CONSIDERACIONES EN EL DESARROLLO DE TECN	2375
ALGUNAS CONSIDERACIONES SOBRE EL CULTIVO DE TOMA	2123
ALGUNOS ASPECTOS METODOLOGICOS DE LA GENERACION	2502
ALTERING THE PRESENT PARADIGM: A DIFFERENT PATH	2260
ALTERNATIVES TO MONOCULTURE IN THE HUMID TROPICS	1989
AN ANALYSIS OF PERENNIAL PEANUT (ARACHIS GLABRAT	2150
ANALISIS AGROECONOMICOS MEDIANTE SUPERFICIES DE	2410
ANALISIS AGROPECUARIO DE LA SECCION GUAYABAL, RE	2094
ANALISIS DE LOS FACTORES QUE INCINDEN EN EL REND	2518
ANALYSIS OF FARMER MANAGED-ON-FARM POTASSIUM EXP	2511
ANALYSIS OF RURAL EMPERICAL PRACTITIONERS.	2218
ANALYSIS OF THE RELATIONSHIP BETWEEN INFRASTRUCT	2172
ANNOTATED BIBLIOGRAPHY OF PIGEONPEA, 1900-1977.	2138
ANTHROPOLOGIST AND ECONOMIST: PARTNERS IN REGION	2661
APPLICATION OF SCIENCE AND TECHNOLOGY TO LONG-RA	1992
APPLYING ECONOMETRIC TECHNIQUES TO ECONOMIC ANTH	2474
APPROPRIATE CONSULTANCY FOR SMALL BUSINESS. IN:	2288
APPROPRIATE METHODOLOGY FOR APPROPRIATE TECHNOLO	2366
APPROPRIATE TECHNOLOGY: AN IMPORTANT FIRST STEP.	2371
ART OF INFORMAL AGRICULTURAL SURVEY.	2571
ASIAN CROPPING SYSTEMS RESEARCH: MICROECONOMIC E	1985
ASPECTOS AGRO-SOCIOECONOMICOS GENERALES SOBRE TR	2425
ASPECTS OF AGRICULTURAL DEVELOPMENT IN THE SOUTH	2204
ASSESSING ECONOMIC STRATIFICATION IN RURAL COMMU	2564
ASSESSING FARMERS' NEEDS IN DESIGNING AGRICULTUR	2604
ASSESSMENT OF IMPACT OF DEEP VERTISOL TECHNOLOGY	2364
BANGLADESH SMALL FARMS TO ADOPT INTEGRATED FAMIL	2323
BEAN PROGRAM, 1979 ANNUAL REPORT.	2124
BEAN PROGRAM, 1981 ANNUAL REPORT.	2125

CONDICIONES AGRO-SOCIOECONOMICAS DEL PROYECTO DE	2067
CONFUSION: TECHNIQUE FOR TUBER MOTH CONTROL.	2156
CONSEQUENCES OF SMALL-FARM MECHANIZATION.	2346
CONSIDERACIONES AGRONOMICAS ACERCA DE FRUTALES E	2129
CONSIDERACIONES SOCIOECONOMICAS EN SISTEMAS DE C	2411
CONSTRAINT TO FERTILIZER USE IN NIGERIAN SMALL-F	2103
CONTRACTUAL ARRANGEMENTS, EMPLOYMENT AND WAGES I	2387
CONTRIBUTIONS OF DECISION-TREE METHODOLOGY TO A	2644
CONTRIBUTIONS OF DECISION-TREE METHODOLOGY TO A	2480
COST DYNAMICS: SCALE AND EXPERIENCE EFFECTS.	2287
COST EFFECTIVENESS OF RAPID APPRAISAL FOR RURAL	2558
COURSE IN FARMING SYSTEMS RESEARCH: THE CORNELL	2635
CREATING AN ON-FARM RESEARCH PROGRAM IN ECUADOR:	2514
CREDIT MARKETS IN THE SEMI-ARID TROPICS OF RURAL	2280
CRITICAL ISSUES FACING THE SMALL FARMER.	2402
CRITIQUE OF TRADITIONAL AGRICULTURAL CREDIT PROJ	2279
CROP BREEDING AND IMPROVED SEED.	2352
CROP DIVERSIFICATION MATRIX: INTRODUCTION.	2140
CROP FAILURE AND INTERCROPPING IN THE SEMI-ARID	2016
CROP GERMPLASM CONSERVATION AND DEVELOPING COUNT	2127
CROP INTENSIFICATION FOR THE ASIAN RICE FARMER.	2008, 2593
CROPPING SYSTEMS AND SOIL CLASSIFICATION FOR AGR	2509, 2613
CROPPING SYSTEMS IN DESPIRE, SOUTHERN HONDURAS.	1988
CROPPING SYSTEMS PROGRAM ACTIVITIES IN NEPAL FOR	1987
CUATRO ANOS DE INVESTIGACION SOBRE MAIZ EN GUATE	2137
CULTIVATING SOILS OF TROPICAL STEEPLANDS.	2007
CULTIVO DE AJONJOLI.	2142
DECISIONS ABOUT FERTILIZING PASTURES.	2105
DEMONSTRATIONS OF AN INTERDISCIPLINARY APPROACH	2546
DEMONSTRATIONS OF AN INTERDISCIPLINARY FARMING S	2499
DENOUNCE THE GANG OF STATITICIANS. STRUGLE AGAIN	2566
DESARROLLO DE ALTERNATIVAS TECNOLOGICAS APROPIAD	2087
DESARROLLO DE aTERNATIVAS TECNOLOGICAS APROPIA	2612
DESARROLLO, PRUEBA Y TRANSFERECIA DE PROTOTIPOS	2041
DESIGN OF THE ON FARM RESEARCH PROGRAM.	2631
DESIGNING AGROECOSYSTEM MANAGEMENT PLANS FORSMAL	2305
DETERMINANTS AND IMPLICATIONS OF CROP FAILURE IN	2438
DETERMINATION OF RELEVANT RESEARCH PRIORITIES FO	2658
DETERMINING THE APPROPRIATE COMPONENT TECHNOLOGY	2131
DEVELOPING MORE PRODUCTIVE FARMING SYSTEMS.	2519
DEVELOPMENT AND DIFFUSION OF RICE VARIETIES IN I	2224
DEVELOPMENT OF AGRICULTURAL MECHANIZATION TECHNO	2347
DEVELOPMENT OF INTEGRATED AGRICULTURAL, LIVESTOC	1969
DEVELOPMENT OF THE HUMAN RESOURCE TO GENERATE IM	2632
DIAGRAMA DE FLUJO EN LA SEQUENCIA OPERATIVA DEL	2229
DIGESTS OF DISCUSSION PAPERS [PRESENTED AT] AIRL	2174
DIMENSIONS OF FARM LEVEL DIVERSIFICATION IN THE	2440
DIRECT AND INDIRECT METHODS OF OBSERVATION IN RA	2554
DYNAMICS OF SHIFTING CULTIVATION, RURAL POOR, CA	2056
ECOLOGICAL AND ENVIROMENTAL INDICATORS FOR THE R	2090, 2096
ECOLOGICAL BASIS FOR THE APPLICATION OF TRADITIO	2483
ECOLOGICAL INDICATIONS OF THE NEED FOR A NEW APP	1998
ECOLOGICAL SYSTEMS CONCEPTUAL FRAMEWORK FOR AGRI	2627
ECONOMIC ANALYSIS OF BIOLOGICAL NITROGEN FIXATIO	2630

FACING UP TO AFRICA'S FOOD CRISIS.	2298
FACTORS INFLUENCING FARM AND OFF-FARM WORK DECIS	2443
FARM BY-PRODUCTS UTILIZATION FOR IMPROVED CARABA	2065
FARM MANAGEMENT STUDIES AND THE DECISION PROCESS	2555
FARM SYSTEMS IN THE COLONIZATION CRESCENT OF SAN	1965
FARMER FIELD PREPARATION AND NO TILLAGE PRACTICE	2576
FARMER INPUTS TURN DIRECTION OF AGRICULTURAL RES	2456
FARMER-BACK-TO-FARMER: A MODEL FOR GENERATING/AC	2524
FARMERS, LOCATION, AND THE DIFFERENTIATION OF CRO	1957
FARMING SYSTEM RESEARCH (FSR) IN HONDURAS, 1977-	2607
FARMING SYSTEMS APPROACH: SOME UNANSWERED QUES	2453
FARMING SYSTEMS APPROACH TO RESEARCH. IN: FSR Ba	2615
FARMING SYSTEMS COMPONENTS FOR SELECTED AREAS IN	2080
FARMING SYSTEMS CONTRIBUTION TO IMPROVED RELEVAN	2464
FARMING SYSTEMS IN ACOSTA-PURISCAL, COSTA RICA.	1968
FARMING SYSTEMS IN CENTRAL AMERICA, RESEARCH HIG	1968
FARMING SYSTEMS IN JINOTEGA, NICARAGUA.	1975
FARMING SYSTEMS IN THE FIELD: PROCEEDINGS OF KAN	2475
FARMING SYSTEMS RESEARCH & DEVELOPMENT AND/OR AG	2539
FARMING SYSTEMS RESEARCH AND DEVELOPMENT.	2495
FARMING SYSTEMS RESEARCH AND DEVELOPMENT: GUIDEL	2536
FARMING SYSTEMS RESEARCH AND EXTENSION: PRELIMIN	2666
FARMING SYSTEMS RESEARCH AS A TOOL FOR IDENTIFYI	2501
FARMING SYSTEMS RESEARCH IN GUATEMALA.	2641
FARMING SYSTEMS RESEARCH IN SUDAN AND HONDURAS.	1960
FARMING SYSTEMS RESEARCH IN THE CONTEXT OF MALI.	2515
FARMING SYSTEMS RESEARCH IN WEST AFRICAN AGRICUL	2513
FARMING SYSTEMS RESEARCH SYMPOSIUM. (Proceeding	2473
FARMING SYSTEMS RESEARCH: ISSUES IN RESEARCH STR	2494, 2548,
	2579, 2585
FARMING SYSTEMS UNDER VARIOUS ECOLOGICAL CONDITI	2017
FARMING SYSTEMS, INCLUDING ANIMALS,	2070
FEATURES OF TRADITIONAL FARMING SYSTEMS IN TWO V	1973
FEEDING STRATEGY OF THE GOAT.	2044
FERTILIZER RESPONSE OF IMPROVED SORGHUM CULTIVAR	2107
FERTILIZER RESPONSIVENESS OF CHICKPEAS IN INDIA:	2153
FERTILIZER USE IN SEMI-ARID TROPICAL INDIA: THE	2146
FINAL CONTRACT REPORT: GUATEMALAN SMALL FARMER	2091
FINAL ISSUE: IRT CLOSES DOWN.	2369
FINCA DE HONDURAS COMO UN SISTEMA: ESTUDIO DE CA	2408
FOCUSING FIELD RESEARCH ON FUTURE CONSTRAINTS T	2237
FOOD PRICE POLICY AND INCOME DISTRIBUTION IN LOW	2317
FOOD SECURITY: AN INSURANCE APPROACH.	2311
FOOD, FUEL, AND FERTILIZER FROM ORGANIC WASTES.	2370
FOOD, HEALTH, AND POPULATION IN DEVELOPMENT STRA	2309
FOUR YEARS OF HISTORY.	2663
FRIJOL, PAPA, TRIGO Y LECHUGA CON MAIZ-CHIMALTEN	1997
FUNGIBILITY AND THE DESIGN AND EVALUATION OF AGR	2284
GAME OR CATTLE FOR MEAT PRODUCTION ON KENYA RANG	2049
GENETIC YIELD IMPROVEMENT OF U.S. MAIZE CULTIVAR	2092
GENOTYPE X CROPPING SYSTEM INTERACTIONS OF PEANU	2025
GEOGRAPHY IS A BOTTLE OF HEINEKEN LAGER BEER-HOW	2527
GRANOS BASICOS EN MULTICULTIVOS.	1986
GRATEMALA FOOD PRODUCTIVITY AND NUTRITION IMPRO	2656

INTEGRATIVE AGRICULTURAL SYSTEMS RESEARCH.	2489
INTER-DISCIPLINARY CO-OPERATION IN THE SELECTION	2577
INTER-DISCIPLINARY DIALOGUE ON WORLD HUNGER: A S	2334
INTERACTIONS OF CROPS AND LIVESTOCK PRODUCTION I	2061
INTERCROPPING WITH CASSAVA IN CENTRAL AMERICA. I	2014
INTERDISCIPLINARY APPROACH TO INTERNATIONAL AGRI	2640
INTERDISCIPLINARY DEVELOPMENT AND TRANSFER OF PO	2590
INTERNAL DYNAMICS OF HOUSEHOLDS: A CRITICAL FACT	2307
INTERNATIONAL TECHNOLOGY TRANSFER AND THE AFRICA	2356
INTERSECTORAL FACTOR MOBILITY AND AGRICULTURAL G	2318
INVESTIGACION Y DESARROLLO DE SISTEMAS AGRICOLAS	2496
INVESTIGATION OF FARMING IN PERU BY MEANS OF A M	2540
INVESTMENT AND INPUT REQUIREMENTS FOR ACCELERATI	2253
JAMAICA: A UNIQUE FARMING SYSTEM.	2086
JOJOBA: HOW TO GROW IT.	2143
JOJOBA: WHAT IS IT?	2144
KEY ISSUES AFFECTING FIELD DESIGN AND MANAGEMENT	2462
KITALE MAIZE: THE LIMITS OF SUCCESS.	2308
KNOWLEDGE FLOWS IN AGRICULTURE: LINKING RESEARCH	2614
LAND SYSTEMS OF HILL AND HIGHLAND TROPICAL AMERI	2095
LEARNING FROM PEASANT FARMERS: SOME CARRIBEAN EX	2386
LEARNING TO AID THE POOR: A CURRICULUM PROPOSAL.	2653
LESOTHO: EXTENSION FROM AFRICA TO WASHINGTON STA	2273
LESSONS LEARNED: LESSONS FROM GRASS-ROOT DEVELOP	2194
LINE SOURCE SPRINKLERFOR CONTINUOUS VARIABLE IRR	2117
LINKING LEVELS OF PLANTING AND ACTION FOR PARTIC	2648
LIVESTOCK DEVELOPMENT IN SUDSAHARAN AFRICA: CONS	2076
LIVESTOCK IN FARMING SYSTEMS RESEARCH FOR SMALLH	2064
LIVESTOCK SUBSECTOR ASSESSMENT FOR HAITI.	2069
LIVESTOCK SYSTEMS AND ANIMAL HEALTH.	2050
LOCATION SPECIFICITY PROBLEM IN FARMING SYSTEMS	2512
LOS COMPONENTES DEL RENDIMIENTO Y SU APLICACION	2151
LOW COST APPROACH TO UNDERSTANDING SMALL FARMERS	2466
MAIZE FERTILIZER EXPERIMENTS IN WESTERN TANZANIA	2110
MAIZE IN NORTH VERACRUZ STATE, MEXICO--FARMER PR	1961
MAIZE IN THE MAMPONG-SEKODUMASI AREA: RESULTS OF	1959
MAIZE MARKETING AND DISTRIBUTION IN SOUTHERN ZAI	2289
MAN'S INFLUENCE ON TROPICAL MOUNTAIN ECOSYSTEMS	2085
MANIPULATION OF INSECT POPULATIONS THROUGH SEASO	2155
MANPOWER AND TRAINING PLAN FOR THE AGRICULTURAL	2322
MANUAL PARA MULTICULTIVOS.	1994
MARCO CONCEPTUAL PARA LA INVESTIGACION CON SISTE	2487
MATCHING RICE AND CORN VARIETIES FOR INTERCROPPI	2026
MECHANIZATION OF SMALL SCALE PEASANT FARMING. (R	2358
MEETING FOOD NEEDS IN THE DEVELOPING WORLD: THE	2314
MEMORIA DE LABORES: ENERO-DICIEMBRE 1974.	2242
MENTAL CONSTRUCT FOR UNSTRUCTURED ON-FARM INTERV	2550
METHOD FOR ESTIMATING THE ECONOMIC VIABILITY OF	2168
METHODOLOGICAL ISSUES FACING SOCIAL SCIENTISTS I	2609
METHODOLOGY FOR ON FARM CROPPING SYSTEMS RESEARC	2601
METHODOLOGY FOR ON-FARM CROPPING SYSTEMS RESEARC	2602
METHODOLOGY FOR THE TRANSFERENCE OF IMPROVED TEC	2378
METHODOLOGY OF THE CIMMYT APPROACH TO TECHNOLOGY	2557
METODOLOGIA MULTIDISCIPLINARIA PARA GENERAR NUEV	2491

POTATO STORAGE SYSTEMS IN THE MANTARO VALLY REGI	2291
POTENTIAL FOR INCREASING INCOMES ON LIMITED-RESO	2382
POTENTIAL FOR WATER HARVESTING AND SUPPLEMENTARY	2116
POTENTIAL USE OF WEEDS IN THE MANIPULATION OF BE	2161
PRELIMINARY STUDY OF THE COFFEE SITUATION IN THE	2384
PREPOSAL [i.e., PROPOSAL] TO CENTER FOR ENVIRONM	2139
PRIORIZACIONALES NACIONALES DE LAS AREAS DE ACCI	2341
PROBLEMS AND CHALLENGE OF AGRICULTURE IN A RAPID	2190
PROCEEDINGS, FARMING SYSTEMS SEMINAR WORKSHOP, M	2520
PRODUCCION AGROPECUARIA Y FORESTAL EN ZONAS DE L	2037
PRODUCCION DE MAIZ EN GUATEMALA: DIFERENCIAS TEC	2152
PRODUCING FEEDER PIGS.	2046
PRODUCTION FUNCTIONS AND DECISION MODELS: COMPLE	2433, 2479
PRODUCTION OF CORN AND SOYBEANS IN ALTERNATE PAI	2018
PRODUCTION OF CORN AND SOYBEANS IN ALTERNATIVE P	2018
PROGRAM ANDIO DE DESARROLLO TECNOLOGICO PARA EL	2254
PROGRAM OF MICRO-LEVEL STUDIES IN RURAL SRI LANK	2535
PROGRAMA PARA GRADUADOS EN CIENCIAS AGRARIAS.	2649
PROJECT TO IDENTIFY SUITABLE INNOVATIONS FOR SMA	2223
PROPUESTA DE PROYECTO: MULTICULTIVOS.	1981
PUBLIC DISTRIBUTION OF FOODGRAINS IN KERALA-INCO	2303
PUBLICACIONES SOBRE ECONOMIA AGRICOLA EN COLOMBI	2449
PUBLICATION LIST: AGRICULTURAL FINANCE PROGRAM,	2282
PUBLICATIONS OF THE SOCIAL SCIENCE DEPARTMENT.	2227
PUEBLA PROJECT.	2468
RAPID AERIAL SURVEY TECHNIQUES FOR RURAL AREAS.	2547
RAPID APPRAISAL AND COST-EFFECTIVE PARTICIPATORY	2538
RAPID APPRAISAL FOR RURAL DEVELOPMENT.	2551
RAPID APPRAISAL FOR RURAL PROJECT PREPARATION.	2559
RAPID RURAL APPRAISAL: A PERSONAL VIEW OF THE FI	2451
RAPID RURAL APPRAISAL: A REVIEW OF THE DECEMBER	2467
RATE AND SEQUENCE OF ADOPTION OF IMPROVED CEREAL	2353
RATE OF ADOPTION OF NEW FARM PRACTICES IN THE CE	2357
RATIONALISING MIXED CROPPING UNDER INDIGENOUS CO	2015
RECOMMENDATION DOMAINS FOR DISTRICTS IN CENTRAL	2068
RECOMMENDATION DOMAINS: A FRAMEWORK FOR ON-FARM	2380
RECONNAISSANCE SOCIOECONOMIC SURVEYS IN NORTH AN	1966
RECUPERACION DE LADERAS EROSIONADAS POR EL CULTI	2101
REDUCED TILLAGE TECHNOLOGY AND KENTUCKY SMALL FA	2033
REESTRUCTURACION DE LA UNIDAD TECNICA-1979.	2243
REGION, FARM AND AGROECOSYSTEM CHARACTERIZATION:	2626
REGIONAL DEVELOPMENT PLANNING: A CRITICAL ASSES	2320
REGIONAL DEVLOPMENT OF BEAN TECHNOLOGY PROVIDES	2133
REGISTROS ECONOMICOS DE PRODUCCION CON AGRICULTO	2417
REGISTROS ECONOMICOS DE PRODUCCION DE MAIZ CON A	2388
REGISTROS ECONOMICOS DE PRODUCCION EN MAIZ, AJON	2416
REGISTROS ECONOMICOS DE PRODUCCION EN MAIZ, FRIJ	2390
REGISTROS ECONOMICOS DE PRODUCCION EN MAIZ-FRIJO	2400
REGISTROS ECONOMICOS DE PRODUCCION EN MOLPA (MAI	2426
REGISTROS ECONOMICOS DE PRODUCCION EN: MAIZ, FIJ	2422
REGISTROS ECONOMICOS DE PRODUCCION MAIZ Y TRIGO	2401
REGISTROS ECONOMICOS DE PRODUCCION MAIZ, AJONJOL	2391, 2392
REGISTROS ECONOMICOS DE PRODUCCION MAIZ, FRIJOL,	2421
REGISTROS ECONOMICOS DE PRODUCCION MAIZ, PARCELA	2476

SEGUNDA FASE EN LA EVALUACION DE VARIEDADES DE M	2506
SELECTING INNOVATIONS FOR SMALL FARMERS.	2376
SELECTION AND IDENTIFICATION OF APPROPRIATE VARI	2592
SELF-HELP ENTERPRISE DEVELOPMENT.	2275
SEMI-ARID FOOD GRAIN RESEARCH AND DEVELOPMENT PR	1956
SEMINAR ON AFRICAN AGRICULTURE AND RURAL DEVELOP	1978
SENSIBILIDAD DEL CULTIVO DE MAIZ AL CONTROL DE L	2089
SENSITIVITY TESTS OF THE CROP VARIABLES IN RICEM	2097
SENSITIVITY TESTS OF THE ENVIROMENTAL VARIABLES	2098
SENSITIVITY TESTS OF THE ENVIRONMENTAL VARIABLES	2099
[SERIES OF LETTERS CONCERNING THEORETICAL VS. EM	2504
SHEEP AND GOATS IN DEVELOPING COUNTRIES: THEIR P	2078
SHORTCUT METHODS IN INFORMATION GATHERING FOR RU	2553
SIEMBRAS MULTIPLES E INTERCALADAS.	2024
SISTEMA DE SIEMBRA DE SUCROS DOBLES DE MAIZ CON	2028
SISTEMA TECNOLOGIA AGRICOLA. IN: Notica.	2532
SISTEMAS DE CULTIVOS DE LADERA PARA PEQUENOS Y M	1995
SISTEMAS DE CULTIVOS PARA LOS AGRICULTORES TRADI	1996
SISTEMAS DE CULTIVOS Y PRODUCCION BOVINA PARCELA	1972
SISTEMAS INTENSIVOS CON ROTACION DE CULTIVOS ANN	2036
SIX MONTH STATUS REPORT OF THE SMALL FARM MANAGE	2325
SMALL ANIMALS FOR SMALL FARMS IN LATIN AMERICA.	2054
SMALL ANIMALS FOR SMALL FARMS.	2048
SMALL FARM DEVELOPMENT AND CROPPING SYSTEMS RESE	2264
SMALL FARM SYSTEMS IN THREE ZONES OF GUATEMALA.	2169
SMALL FARM SYSTEMS PROGRAM: REPORT OF A FIELD VI	1953
SMALL FARMER ACCEPTANCE OF ICTA TECHNOLOGY.	2377
SMALL FARMER IS A PROFESSIONAL: LESSON NO.1 FOR	2636
SMALL FARMERS COPE WITH RISK AND SCIENTISTS.	2338
SMALL FARMS IN U.S. AGRICULTURE.	2173
SMALL HOLDER AGRICULTURE IN EASTERN NIGERIA.	2232
SMALL RUMINANT RESEARCH WITH COMMUNITY DEVELOPME	2583
SMALL SCALE INTENSIVE FOOD PRODUCTION. (Report o	2415
SMALL-FARM PROGRAM IN SOUTHEAST STIRS CONTROVERS	2184
SOCIAL INVENTIONS FOR SOLVING HUMAN PROBLEMS. (A	2541
SOCIAL ORGANIZATION AND SMALL WATERSHED DEVELOPM	2115
SOCIAL RELATIONS OF LAND AND FERTILIZER USE AND	2196
SOCIAL SCIENCE TRAINING FOR REGIONAL AGRICULTURA	2664
SOCIAL SCIENTISTS IN AGRICULTURAL RESEARCH: LESS	2647
SOCIO-CULTURAL CONTEXT OF COMMUNITY DEVELOPMENT:	2214
SOCIO-ECONOMIC CONSTRAINTS TO THE PRODUCTION, DI	1970, 1971
SOIL MOISTURE-BASED YIELD MODEL OF WETLAND RAINF	2114
SOILS OF THE TROPICS AND THE WORLD FOOD CRISIS.	2109
SOLUTIONS TO ENVIROMENTAL AND ECONOMIC PROBLEMS	2516
SOME ASPECTS OF WEED CONTROL IN MULTIPLE CROPPIN	2163
SOME DIMENSIONS OF TRADITIONAL FARMING IN SEMI-A	1999
SOME NOTES ON THE ART OF INFORMAL INTERVIEWING.	2570
SOME NOTES ON THE FARMER AS THE CLIENT FOR RESEA	2465
SOME ORGANIZATIONAL ASPECTS OF AGRICULTURAL AND	2178
SOME PERSPECTIVES ON THE IMPACT OF CHANAINA AGRI	2629
SOME PROBLEMS IN THE IMPLEMENTATION OF AGRICULTU	2659
SONDEO	2573
SONDEO DE CHIMALTENANGO.	2563
SONDEO DE ZACAPA.	2001

TRANSFER OF TECHNOLOGY TO SMALL FARMERS: ON-FARM	2274
TRIP REPORT ON VISIT TO THE HUALLAGA RIVER BASIN	2186
TRIP REPORT: [USAID MULTIPLE CROPPING PROJECT, E	2250
TRIP REPORT:CIMMYT NETWORKSHOP ON DRAFT POWER AN	2045
TROPICAL AGROECOSYSTEMS,	2498
TROPICAL FARMING: TO TILL OR NOT TO TILL?	2034
TROPICAL FOREST SHEEP ON LEGUME FORAGE/FUEL WOOD	2057
TWENTY FIVE YEARS OF DIETARY CHANGE IN SIMBU PRO	2217
TWO ASPECTS OF FARMING IN SAT UPPER VOLTA: ANIMA	2072
TWO VIEWS OF THE KASAMA-LESSEE SHIFT IN BULACAN:	2205
TYPOLOGY AND POLICY FOR SMALL FARMS. IN: Souther	2208
UN NUEVO ENFOQUE AL PROCESO DE GENERAR Y PROMOVE	2234
UNDERSTANDING PROFESSIONALS: SMALL FARMERS AND S	5460
UNDERSTANDING SMALL FARMERS	2556
UNDERSTANDING SMALL FARMERS: SOCIOCULTURAL PERSP	2525, 2618
UNDERSTANDING THE PROCESS OF DESERTIFICATION THR	2569
UNFORSEEN CONSEQUENCES OF INTRODUCING NEW TECHNO	2359
UNIT FARMS AND FARMING SYSTEMS RESEARCH: THE IIT	2251
USE AND POTENTIAL OF DRAFT ANIMALS IN SMALL FARM	2066
USING THE CONCEPT OF AGROECOSYSTEM DETERMINANTS	2610
USO DE AGROQUIMICOS EN ARROZ: RESULTADOS PRELIMI	2089
USO DEL SORGO PARA CONSUMO HUMANO: CHARACTERISTIC	2530
VALIDATION OF TECHNOLOGY IN ICTA.	2302
VALIDATION OF TECHNOLOGY.	2235
VANISHING FORESTS.	2038
VILLAGE CONSUMERS PREFERENCE FOR SORGHUM VARIETI	2219
VILLAGE LEVEL IMPACT OF MACHINE THRESHING AND IM	2345
VILLAGE VIABILITY ASSESSMENT PROCEDURES IN TANZA	2211
WATERMELONS AND SQUASH IN ALACHUA COUNTY, FLORID	1963
WEED CONTROL IN MUNGBEAN.	2164
WEED-FERTILIZER INTERACTIONS IN RICE.	2165
WEEDS MAY AUGMENT BIOLOGICAL CONTROL OF INSECTS.	2160
WEST AFRICAS AGRARIAN CRISIS.	2299
WHAT DO WE KNOW ABOUT AFRICAN AGRICULTURAL DEVEL	2319
WHOLE-FARM MODELING FOR ASSESSMENT OF DRYLAND TE	2624
WHY DO BANKS AND COOPERATIVES RESIST LENDING TO	2278
WHY NOT A TRACTOR THAT PROVIDES MEAT, CHEESE AND	2053
WHYS OF TECHNOLOGY ACCEPTANCE BY FARMERS.	2355
WORKING GROUP II: AVAILABLE TECHNOLOGIES, IT INS	2372
WORKSHOP ON METHODOLOGICAL ISSUES FACING SOCIAL	2455
WORKSHOP ON RAPID RURAL APPRAISAL: SITUATIONS AN	2574
WORLD'S VILLAGES A FRESH LOOK.	2191
YIELD AND NET RETURN DISRTRIBUTIONS IN COMON VIL	2430
YIELD GAP ANALYSIS IN DRYLAND AGRICULTURE: PERSP	2595

AUTHOR INDEX

Abel, B.F.....	2287	Binswanger, H.P.....	2080, 2387
Abel, N.....	2547		2432
Abraham, A.....	2184	Birowo, A.T.....	2293
Accatino, P.....	2130	Bishop, J.P.....	2056, 2057
Adams, D.W.....	2279	Bittenbender, H.C.....	2011
Agricultural Education Conf	2222	Black, R.....	2166
AID.....	2040	Bleasdale, J.K.A.....	2132
Alba, A.....	2384	Bolton, F.R.....	2022, 2114
Alexander, M.W.....	2018	Bradfield, S.....	1953, 2169
ALGUNAS CONSIDERACIONES SOB	2123		2186, 2187
Allan, W.....	2185		2212, 2225
Altieri, M.A.....	2154, 2155		2366, 2454
	2160, 2161	Brinkerhoff, D.W.....	2634
Alvarez, J.....	2603	Brol, B.B.....	2388
Anderson, J.R.....	1980	Bunting, A,H.....	2367
Andrew, C.O.....	2337, 2338	Bushman, D.H.....	2058
	2450	Byerlee, D.....	2353, 2368
Andrino, J.....	1951		2455, 2548
Aquiluz, A.....	1981		2579
Araya, G.....	1982	Calderon, S.P.....	2081, 2129
Arcia, G.....	2431		2136, 2389
Arledge, J.E.....	2091		2457
Arze, J.....	1983, 1984	Cantrell, R.....	1956
Ashby, J.A.....	2576	Cardona, D.J.....	2390
Asokan, M.....	2446	Cardona, J.A.....	2391, 2392
ASPAC/FFTC.....	2019	Carruthers, I.....	2544, 2550
Avila, M.....	2041, 2385		2551
Bandong, J.P.....	2131	Carter, W.E.....	2189
Banta, G.R.....	1985	Carter, L.J.....	2082
Barker, D.....	2386	Casey, F.....	2635
Barker, R.....	2442	Casley, D.J.....	2458
Barnett, J.A.....	2451	Castleberry, R.M.....	2092
Bartlett, C.D.S.....	2223, 2376	Catling, H.D.....	2083
	2577	CENDA.....	2354
Bathrick, D.....	2352, 2377	Centro Agrinomico Tropical	2059
	2578, 2632	Cernea, M.M.....	2459
Bavappa, K.V.A.....	2010	Chacon, A.E.....	1986
BEEF-FORAGE SURVEY.....	2042	Chambers, R.....	2294, 2295
Bejarano, W.....	2021		2552, 2553
Bell, C.E.....	2162		2636, 5460
Belshaw, D.G.R.....	2211	Chang, H.S.....	2190
Bender, P.....	1952	Chinchilla, M.E.....	2393, 2461
Benites, J.R.....	2101		2580, 2581
Benor, D.....	2266	Church, P.E.....	2462, 2637
Bernsten, R.H.....	2224, 2365	Chuta, E.....	2296
Bhende, M.J.....	2079, 2280	CIAT.....	1954, 2124
Bialy, J.....	2349		2125, 2133
BIBLIOGRAPHY ON CROP-ANIMAL	2055	CIMMYT.....	2188, 2226
Biggs, S.D.....	2339, 2453	CIMMYT. Economics Staff....	2604
	2623, 2633		
Billings, M.....	2340		

CIP.....	2126, 2134	Escobar, G.P.....	2378
	2135, 2156	Esslinger, D.....	2267
	2227, 2228	ESTUDIO PRELIMINAR SOBRE...	2395
	2290, 2355	EVALUACION DE ACEPTABILIDAD	2084
	2456, 2605	Evans, L.T.....	2171
Clawson, D.L.....	2463	Evenson, R.E.....	2301
Clay, E.J.....	2554, 2555	Examples of Small.....	2231
Colfer, C.J.P.....	2638	Fallon, P.....	2560
Collinson, M.....	2464, 2465	FARMING SYSTEMS RESEARCH...	1960, 2473
	2466, 2556	Feaster, J.G.....	2172
	2557	Feldman, B.M.....	2044
CONDICIONES AGRO-SOCIOECONO	1955	Fienop, D.F.....	2269
Cone, B.W.....	2102	FINAL ISSUE: IRT.....	2369
Conklin, F.S.....	2639	Finkler, K.....	2474
Conlin, S.....	2467	Fitzhugh, H.A.....	2062
Conrad, J.H.....	2060	Flinn, J.C.....	2262
Contreras, M.R.....	2640	Flora, C.B.....	2475
Cordova, H.S.....	2137	Flores, I.....	2397
Cornik, T.R.....	2061	Fogg, C.D.....	2232
Coughenour, C.M.....	1957	FOOD, FUEL, AND.....	2370
Cox, J.....	2157, 2158	French, E.C.....	2371
Cox, M.....	2170	Frost, D.H.....	2372
Critchfield, R.....	2191	Fuenzelida, E.F.....	2643
Cropping Systems Staff.....	1987	Fumagalli, A.....	2233, 2234
Crowder, L.V.....	2606		2235, 2302
Cummings, R.W.....	2468	Galt, D.....	1990, 2594
CUMULATIVE AUTHOR AND.....	2281		2607
Dahiya, B.S.....	2138	Garcia, M.A.....	2398, 2399
Dardon, R.O.....	2641		2400, 2401
Dehgan, B.....	2139	Garcia, S.S.....	2476
Development Alternatives...	2642	Garrett, P.....	2477
Dewalt, B.R.....	1988	Garrity, D.....	2093
DIAGRAMA DE FLUJO.....	2229	Garrity, D.P.....	2478
Dickinson, J.C.....	1989	George, P.S.....	2303
Dierolf, T.S.....	2297	Ghodake, R.D.....	2447, 2595
Dillon, J.L.....	2469		2624
Dogerty, V.S.....	2115	Gines, H.....	1991
Doherty, V.S.....	2192	Gladwin, C.H.....	2236, 2402
Drilon, J.D.....	2230		2433, 2443
Duarte, R.M.....	2394, 2470		2479, 2480
Due, J.M.....	1958		2481, 2482
Duke, J.A.....	2140		2644
Eason, M.....	2043	Gliessman, S.R.....	2483
Eckert, J.....	2472	Godinez, L.H.....	2403, 2404
Edmeades, G.....	1959		2405
Edmond, C.D.....	2396	Golden Jr., W.G.....	2608
EDUCATION AND TRAINING.....	2193	Goldman, R.H.....	2484
Eicher, C.K.....	2298, 2299	Goodell, G.E.....	2304
	2356	Gopal, C.K.....	2116
Ekpere, J.A.....	2103, 2300	Gostyla, L.....	2645
Ellenberg, H.....	2085	Greene, B.A.....	2357
Ellman, A.....	2558, 2559	Gryseels, G.....	2064
EN BUSCA DE.....	2471	Guzman, M.R.de.....	2065
Epstein, T.S.....	2268	Gwin, P.....	2270

Escamilla, E.....	2104	Hakin, P.....	2194
Hammond, P.B.....	2195	IDA 201 COURSE.....	2650
Hanks, R.J.....	2117, 2118	IFPRI.....	2245
Hansen, A.....	2485	Infanger, C.....	2449
Hansen, E. de G.R.....	2196	INTERNAL DYNAMICS OF.....	2307
Hardaker, J.B.....	2379, 2406 2582	Inversin, A.R.....	2350
Harper, M.....	2288	IRRI.....	2346
Harrington, L.W.....	1961, 2380 2407, 2609	JAMAICA: A UNIQUE.....	2086
Hart, R.D.....	2012, 2013 2305, 2408 2486, 2487 2489, 2489 2490, 2583 2610, 2625 2626, 2627	Janzen, D.H.....	2498
Harvey, P.W.....	2217	Jennings, P.R.....	2145
Harwood, R.R.....	1992, 2023	Jesus, A.de.....	2246
Hautzinger, F.....	2066	Jha, D.....	2146
Hemmi, K.....	2358	Jodha, N.S.....	1999, 2435
Henson, J.B.....	2045	Johnson, B.B.....	2413
Hepp, R.E.....	1962, 2046 2173, 2434	Johnson, C.W.....	2308
Herdt, R.W.....	2237	Johnston, B.F.....	2309
Hewitt, T.D.....	2409	JOJOBA: HOW TO.....	2143
Higuaita Munoz, F.....	2024	JOJOBA: WHAT IS.....	2144
Hildebrand, P.E.....	1994, 1995 1996, 1997 2197, 2238 2359, 2373 2410, 2411 2491, 2492 2493, 2494 2495, 2496 2561, 2562 2562, 2584 2585, 2646 1993	Jones, C.W.....	2448
Holdcroft, L.E.....	2306	Kansas State Univ. Farming	2068
Holdridge, L.R.....	1998	Kean, S.A.....	2651, 2652
Holt, J.....	2105	Kellogg, E.D.....	2586
Holzinger, T.....	2047	Kenya. Ministry of Agricult	2499
Horton, D.E.....	2141, 2647	Khan, A.H.....	2310
Howell, J.....	2271, 2272	Khan, A.U.....	2347
Huke, R.E.....	2381	Khan, M.M.....	2147
Hunter, G.....	2648	Kikuchi, M.....	2198, 2360 2361
Huss, D.L.....	2048, 2054	Kirkby, R.....	2414
IADS.....	2174	Knauft, D.A.....	2025
ICA.....	2239, 2649	Kocher, J.E.....	2176
Icaza, G.....	2444	Konandreas. P.....	2311
ICTA.....	2067, 2142 2240, 2241 2242, 2243	Korten, D.C.....	2247, 2312 2653
		Kostewicz, S.....	1963
		Kshirsagar, K.G.....	1964, 2500
		Lagemann, J.....	2501
		Laird, R.J.....	2502
		Landhe, S.R.....	2382
		League for International Fo	2415
		Leal, J.C.....	2416, 2503
		Lele, U.....	2313
		Leontief, W.....	2504
		LESOTHO: EXTENSION FROM....	2273
		Lingenfelter, S.....	2214
		Lionberger, H.F.....	2505, 2611
		LIVESTOCK SUBSECTOR ASSESSM	2069
		Lohani, S.N.....	2026
		Lois, J.E.....	2094
		Longhurst, R.....	2564
		Lopez, J.T.....	2417
		Love, A.R.....	2248
		Low, A.R.C.....	2418
		Lowell, S.H.....	2249

	2244, 2412	Mabawonku, A.F.....	2315
	2497, 2563	Magbanua, R.D.....	2035
Magloire, E.....	2087, 2506	Olson, C.V.....	2598
	2587, 2612	Omar, A.B.H.....	2178
Malton, P.J.....	2199	Oram, P.....	2253
Mann, C.K.....	2588	Orellana, L.O.....	2419, 2420
Martinez, E.....	2148	ORGANIZACION DEL SISTEMA...	2363
Martinez, J.C.....	2596, 2654	Ortiz, L.....	2421
Matteson, P.C.....	2159	Ortiz, R. (trans.).....	2517
Maxwell, S.....	1965, 2285	DEL SISTEMA.....	2363
	2507, 2655	Ortiz, L.....	2421
McDermott, J.K.....	2250, 2316	Ortiz, R. (trans.).....	2517
	2508, 2656	Oxley, J.....	2167
McDowell, R.E.....	2049, 2070	Pacey, A.....	2568
	2071	Palma E., M.T.....	2422
McIntire, J.....	1966, 2072	Pant, C.....	2445
McIntosh, J.L.....	2509, 2613	PAUTAS METODOLOGICAS PARA..	2567
McMennamy, J.A.....	2149	Pautas Metodologicas para..	2589
McPherson, W.W.....	2510	Pelaez G., J.G.....	2518
MEETING FOOD NEEDS.....	2314	Perez R., C.N.....	2106
Mellor, J.W.....	2317	Philippe, E.....	2323
Mendoza, T.C.....	2150, 2511	Phillips, R.E.....	2031
Menz, K.M.....	2251, 2512	Pineiro, M.....	2342
Merrill, W.C.....	2348	PLANIFICACION Y PROGRAMACIO	2628
MICROCOMPUTERS IN INTERNATI	2336	Platen, H. Von.....	1968
Mitchell, R.J. (ed.).....	2374	Plucknett, D.L.....	2127, 2324
Molohon, K.T.....	2200	Poats, S.V.....	2179
Mondlak, Y.....	2318	Poey D., F.....	2151
Moock, P.R.....	2215	Pontias, J.....	2325
Moody, K.....	2163, 2164	Posner, J.L.....	2095, 2326
	2165	Potts, M.J.....	2274
Moore, M.....	2565, 2566	Prera, C.D.L.....	2423
Morales, C.E.O.....	2201	Price, E.....	2519, 2616
Moreno, R.A.....	2014	PRIORIZACIONALES NACIONALES	2341
Moris, J.R.....	2319	Proceedings, Farming System	2520
Morris, W.H.M.....	2177, 2513	PRODUCCION AGROPECUARIA Y..	2037
	2657	Proenza, F.J.....	2152
Morse, R.....	2351	Programa Andio de.....	2254
Morss, E.R.....	2320	Purvis, M.J.....	2660
Moscardi, E.....	2514	Rajendran, S.....	2153
Mosher, A.T.....	2202	Rao, P.P.....	2107, 2219
Murphy, C.M.....	2218	RB.....	2000
Murphy, J.....	2263	Reategui, R.R.....	1969
Mwamufiya, M.....	2289	Reddi, K.C.S.....	2027
Najel, U.J.....	2614	Reeves, E.B.....	1970, 1971
National Council for Scienc	2322		2569
NATIONAL RURAL DEVELOPMENT.	2321	Reiche, C.E.....	1972, 2521
Navarro, M.....	2089		2522
Netting, R.M.....	2203	Reiss, G.....	2038
Ngambeki, D.S.....	2597	Reyes, M.....	2424
Norman, D.W.....	2015, 2362	Rhoades, R.E.....	2523, 2524
	2515, 2615		2525, 2526
	2658, 2659		2570, 2571
Nyerere, J.K.....	2252		2590, 2617

Nygaard, D.....	2073				2618
Ohio State Univ.....	2282			Richards, P.....	2527
Oldenstadt, D.L.....	2516			Ritchey, D.K. (ed.).....	2108
Robinson, J.B.D.....	2599			Swisher, M.E.....	2375, 2629
Rockefeller Foundation.....	2074, 2528			Takahashi, A.....	2205, 2206
Roe, T.....	2216, 2436			TECHNOSERVE IS PEOPLE.....	2276
ROLE OF THE.....	2329			Tienhoven, N. Van.....	1975, 1976
Ruano A., S.R.....	2075, 2286			TILLAGE WIDTH TRIAL.....	2005
	2383, 2425			TRADE-OFF BETWEEN.....	2077
	2529, 2530			Tweeten, L.....	2207, 2208
	2531, 2572			Valdes, A.....	2257
Rural Development Committee	2180			Valle, R. del.....	2006, 2028
RURAL VENTURE, INC.....	2328			Van Crowder, L.....	2277
Ruttan, V.W.....	2255, 2330			Veloz, A.....	2112
Ryan, J.G.....	2364			Vietmeyer, N.D.....	2053
Saleh, A.A.....	2331			Vinas, M.J.....	1977
Samayoa, E.J.....	2426, 2427			Virgo, K.J.....	2007
	2428, 2429			Vivanco, A.....	2036
	2533			Von Oppen, M.....	2120, 2121
Sanchez, P.A.....	2109			Von Pischke, J.D.....	2284
Sanders, J.H.....	2534			Walker, J.L.....	2619
Sanford, S.....	2574			Walker, T.S.....	2029, 2258
Sarin, R.....	2600				2345, 2430
Sarma, J.S.....	2332				2439, 2440
Scaife, M.A.....	2110			Wallerstein, M.B.....	2334
Scherr, S.J.....	2181			Ward, R.W.....	2265
Schultz, T.W.....	2333			Waugh, R.K.....	2591, 2620
Schwass, R.H.....	2204				2663
Scobie, G.M.....	2283, 2437			Weber, F.....	2539
SELF-HELP ENTERPRISE.....	2275			Wells, M.J.....	2209
Senaratne, S.P.F.....	2535			Welsch, D.E.....	2630
Shaner, W.W.....	2536, 2536			Wentling, M.....	1978
Sharrock, G.O.A.....	2343			Werge, R.W.....	1979, 2291
Shillhorn van Veen, T.W....	2050				2540, 2664
Simpson, J.R.....	2051, 2076			Wharton, C.R.....	2441
	2168, 2182			Whelan, W.P.....	2221, 2259
	2661			Whisler, F.D.....	2097, 2098
Simpson, S.H.....	2016				2099
Singh, K.....	1973, 2438			Whitley, D.....	2210
Singh, R.P.....	2532			WHY DO BANKS.....	2278
SISTEMA TECNOLOGIA AGRICOLA	2119			Whyte, W.F.....	2183, 2541
Small, L.E.....	2128, 2256				2542, 2543
Smith, N.....	2213			Wijewardene, R.....	2034
Smith, N.J.H.....	2002			Wilken, G.C.....	2039, 2100
Sommers, P.....	2001			William, R.D.....	2264
SONDEO DE ZACAPA.....	2017			Wilson, G.F.....	2030
Soria, J.....	2537			Winkelmann, D.....	2544, 2621
Spedding, C.R.W.....	2575			Winrock International.....	2078
Spencer, D.S.C.....	2220			Wolff, T.....	2665
Spencer, T.....	1974			Wood, G.....	2545
Srivastava, B.N.....	2003			Woods, B.....	2260
Stanhill, G.....	2662			Woolley, J.....	2592
Stevens, R.D. (ed.).....	2090, 2096			Wyant, T.....	2122
Stocking, M.....	2344			Yoshida, S.....	2113
Strain, J.R.....					

