



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

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

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

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

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

Index

- Abbott, J. C., 314
Adams, Reinoldo I., 266
Adegboye, Rufus O., 76
Advisory services, uptake of, 323, 324
Africa
 agricultural disincentives, 70–1
 agricultural labour force problems, 65, 70
 agriculture, 63–72
 colonialism, influence on pastoralists, 259
 droughts, 71
 economic growth, 63–4
 effects of political instability, 71
 export crop cultivation, 74
 failure of growth strategies, 227
 food shortages, 213
 labour availability, 530
 need for urban-rural links, 76
 traditional agriculture, 64–5
Agribusiness
 marketing aspect, 303
 role in African agriculture, 77
Agricultural development
 accelerated growth, 293
 and natural resource activities, 256
 effect of marketing, 311–13
Agricultural development – *continued*
 in CMEA countries, 480–94
 alternative scenarios, 488–90
 constant self-sufficiency ratio scenario, 491–2
 free trade scenario, 492–3
 in rural development strategy, 411
 Indonesia policy, 419–20
 inputs, 227
 Mexico, 443–5
 models, 166–80
 policies in East African countries, 566–8
 strategy, 217–19
 related to political strategy, 222
Agricultural economists
 future development, 20–1
 need for dialogue with biophysicists, 254
 objectives, 24–5
Agricultural policies, 118–19
 analyses, 580–4, 287–8
 Australian, in 20th century, 536
 CMEA countries, 485–8
 in OECD, 505
 international linkage, 578–9
 interrelation with trade policy, 507–10
 national models, 576–8
 performance, 510–13
Agriculture
 advantages of large-scale farmers, 347
 Africa, 63–72
 Asia: delivery system problems, 57–8
 growth in south and south-east, 52
 less labour-intensive than estimated, 53
 price policies, 58
 Brazil, 350
 collective, 232–6, 238
 development in socialist economies, 97
 conditions in CMEA countries, 480–1
 disparities in human factor, 331
 European, growth of, 81–2
 market policies, 504
 models for future, 224–5

- modernization, 223
 production differences between north and south EEC, 547-8
 production in East Africa, 560-1
 role in economic development, 216
 share in world trade, 198
 small-scale sectors, 220
 world situation, 598-602
- Ah, J. von, 252
 Ahuja, K., 402
 Aid, *see* Development assistance
 Alberta Pork Producers Marketing Board, 294-301
 American Agricultural Economic Association, 13
 Amin, Mohiuddin Z., 291
 Andal, M. E., 368
 Andersen, Per Pinstrup, 50
 Anderson, W. J., 93
 Angola, 71
 Animal welfare issues, 15
 Antle, John M., 181, 600, 607
 Ashby, A. W., 9
 Asia
 failure of growth strategies, 227
 growth and equity in agriculture, 52-9
 institution framework for growth, 229
 landless rural labour households, 395
 marginal farmers, 396
 near-landless households, 396
 poverty among landless, 379-400
 rural poverty, 52-3
 urban growth, 471
 see also Association of South-East Asian Nations (ASEAN)
 Association of South-East Asian Nations (ASEAN), 153
 co-operation on food, 267
 food demand, 267
 rice, demand projection, 291
 rice and corn: demand, 268-71
 demand and supply implications, 273-6
 supply, 271-3
 Australia, 79, 87-8
 agricultural output, 82
 agricultural trade policy, 511-12, 537-9, 540, 558
 and commerce, 543
 as agricultural exporter, 531-2
 farmers' political representation, 533
 GDP per worker, 84
 marketing, 311
 price and income policy, 531, 532-7, 543
 details, 534-5
 link with trade policies, 539-41
- Austria, variations in farm incomes, 328
 Avila, M., 278, 291
 Baffoe, Frank, 78, 105, 407
 Bangladesh
 rural labour force, 390-1
 transport, 192
 Barmeda, J. N., 469
 Belgium
 land tenure patterns, 436
 variations in farm incomes, 327
 Belshaw, D. S. R., 469, 591
 Benin, 64
 Bergmann, D., 559
 Bhalla, Surjit, 139, 164, 402, 602
 Biogas production, 14
 Birowo, A. T., 27, 417, 441, 592
 Blanckenburg, P. von, 368, 468
 Bohall, R. W., 317, 368, 559
 Botswana, 73
 Brandes, Wilhelm, 415, 601, 603, 605, 607
 Braun, Joachim von, 591
 Brazil
 agricultural policies, 350-5, 357, 367-8
 agricultural sector performance, 350
 economic growth, 349
 effect of technological change, 244-9
 export and domestic crops, 244, 252
 family budget survey, 247
 income disparities, 349
 status as 'special case', 266
 urban population increase, 471
 Breimyer, H. F., 240, 402, 469
 Britton, D. K., 20, 348
 Bromley, Daniel W., 255, 266
 Bublot, G., 330
 Buchholz, H. E., 503, 529, 607
 Bulgaria, 100
 Business cycle, effect on agriculture, 95
- Cameroon, 70
 Campbell, Keith, 9, 26, 593-4
 Canada, 93-4
 agricultural policy, 511-12
 Alberta Pork Producers Marketing Board, 294-301
 efficiency of producer-controlled marketing, 298
 establishment of marketing boards, 295
 hog industry, 296-8
 marketing, 311
 Capital investment, by socialist economies, 98, 104
 Capstick, C., 559
 Carruthers, I., 591

- Casey, Lord, 10
 Cave, Wilfred, 593
 Central America
 cash crops, 282-4
 cattle production model, 284-6
 cropping patterns, 281-2
 dairy production technology, 286-8
 description of circumstances, 278-9
 diversification hampered, 290
 response to technological change, 288
 small farm production systems, 278-89
 research strategy, 279-80
 Centrally-planned economies
 agricultural policies, 512
 objectives, 505
 incomes policy, 504
 Chad, 64, 71
 Chandrakanth, M. G., 78, 138, 180, 193,
 317, 348, 479, 499, 530
 Chawla, H. L., 138, 240
 Chile, economic growth in, 45
 China
 land reform, 232-3
 responsibility system, 235
 Chiroapanda, S., 165
 Clark, William C., 405, 441, 601, 602, 605
 Cleave, John, 212
 Collective organisation of agriculture,
 232-6, 238
 compared with bourgeois peasant
 farming, 234
 Colman, David, 455, 530
 Colombia
 as example of Latin American newly
 industrializing country, 33
 economic performance (1950-80), 36
 factors critical for growth, 50
 import substitution, 40
 population remaining in agriculture, 41
 Commodity agreements, 205
 Common Fund Agreement, 205-6
 Communications
 costs, price effects of, 183
 effects of improvements, 191
 use by more sophisticated farmers, 191
 Congo, 64
 Conservation, *see* World Conservation
 Strategy
 Consumer goods
 changing patterns in Asia, 56
 in development strategy, 218
 Co-operatives, 442
 reasons for failure in Indonesia, 421
 Cortez de Lobão, Antonio, 545, 558, 607
 Council for Agricultural Science and
 Technology (USA), 17
 Council for Mutual Economic Assistance
 (CMEA)
 agricultural development, 480
 agricultural policies, 485-8
 animal husbandry development, 496-7
 calorie consumption levels, 484
 foreign trade, 484
 future for cereals production, 495
 supply and demand trends, 480-5
 urban migration, 490
 Credit availability, 131
 Crop insurance schemes, 131
 Csaki, Csaba, 480, 601, 605
 Czechoslovakia, 99, 100, 102

 Dams, Theodor J., 20, 594, 608
 Dancey, R. J., 348
 Dartington Hall, 9, 10, 17
 Denmark, 79, 87-8
 agricultural output, 82
 land tenure pattern, 436
 Dequin, H., 78
 Destipande, S. H., 530
 de Swardt, M. L. A., 571
 Developed countries, 79-96
 food production growth rate, 197
 income distribution, 321
 levels of production, 136
 part-time farm employment, 372
 Developing countries, 198
 agricultural policies, 512
 objectives, 505
 effects of reducing food imports, 200
 food production growth rates, 197
 food shortages, 197, 199
 income distribution, 139-51,, 470-9
 lessons from Japanese experience,
 341-2
 malnutrition, 472
 marketing, 314
 poverty, 405
 problem of landless poor, 400
 problems of external food supplies, 214
 provision against food shortages, 210
 rural demography, 470-3
 rural non-farm employment, 371
 rural-urban migration, 479
 Development assistance, 525
 'Pareto-safety', 257-8
 problems of maintenance, 315
 to agricultural sector, 201-2
 Droughts, in Africa, 71

 Economic growth
 definition, 595
 effect of development policies, 560
 effect of regional policies, 322
 effect of world situation, 44

- equity implications, 304, 513–15
- human resource potential, 50–1
- in Africa, 63–4
- Japan, 335–41
- model of labour allocation, on – and off-farm, 374–6
- possibly causing rural poverty, 364–5
- 'skipping' primary import substitution phase, 44, 45
- trade-offs with equality, 596–7
- Economies of scale, socialist, not evident in agriculture, 86–7
- Egido, L. Garrido, 135
- Elmhirst, Leonard, 9–10, 17, 20, 24, 27, 592
- Elmhirst Memorial Lecture, 9–19, 593–4
- Endangered species, in conservation strategy, 15
- Energy-intensive agriculture, 224
- Environmentalists
 - ignorance of land-use and conservation principles, 12
 - see also* World Conservation Strategy
- Equity, definition, 595, 597–8
 - see also* Economic growth
- Eskeland, A., 593
- Ethiopia, 71
- Europe
 - decline in agricultural workforce, 83, 94
 - effects of land tenure patterns, 435–7
 - GDP per worker, 84
 - income per worker, 84–5
 - operating and ownership structure of agriculture, 431–4
- European Economic Community (EEC)
 - Common Agricultural Policy (CAP), 510–11, 518
 - contribution, 548
 - inadequacy for southern problems, 554–5
 - support of northern and southern products, 558–9
 - comparison between Italy and new members, 556
 - differences between northern and southern regions, 545
 - export subsidies, 204
 - price-income policies, 548–54
 - regional effects, 549–54
 - probable production by new members, 557
 - regional income disparities, 559
 - regional policies, 137
- European Guidance and Guarantee Fund (FEOGA), 553–4, 556
- Evans, J. A., 367
- Export substitution, in Taiwan, 38
- FAO, *see* United Nations: Food and Agriculture Organization
- Fekete, Ferenc, 105, 240
- Fel'dman, G. A., 219, 226–7
- Fennell, Rosemary, 558
- Fertilizers, chemical, in conservation strategy, 15
- Finland
 - postwar development, 325–6
 - vocational education, 323–4
- Food
 - aid, 209
 - shortages: elimination, 207
 - vulnerable groups, 253
- Food production
 - acceleration in developing countries, 199, 200–2
 - changing economic structure, 255
 - demand in ASEAN countries, 267
 - expansion, 197
 - for domestic consumption, 255
 - in African countries, 64
 - in CMEA countries, 483
 - investment to improve, 201
 - long-term sustainability, 584–6
 - outlook, 16–17
 - price instability, 205
 - self-sufficiency in developing countries, 572
 - sub-regional security schemes, 211
 - Taiwan, 34
 - to meet increased employment, 218–19
 - world, adequate for needs, 418
 - world food security issues, 206–11, 214
- France, 79, 87–8
 - agrarian systems, 266
 - agricultural output, 82
 - land tenure patterns, 436
- Furness, G.W., 180
- Gaetani d'Aragona, G., 240, 516
- Gambia, 64
 - export crops, 74
- Genetic diversity, preservation, in conservation strategy, 15–16
- Genetic engineering, 16
- Germany, 79, 87–8
 - agricultural output, 82
 - Democratic Republic, 102
 - West, land tenure patterns, 436
- Gerrard, Christopher D., 469 560, 590
- Ghai, Dharam, 63, 599, 606
- Ghana, 64, 70, 71, 73
 - export crops, 74
- Government intervention
 - for reasons of equity, 518

- in Canada, through marketing boards, 295
- in East Africa, 590
 - effect on food production, 568–9
 - in food grain markets, 562–6
- in Finland, 326
- in rural development, 173
 - policies, agencies and controls, 175–6
- 'Green Revolution', 14, 109, 112–13
 - early problems with new varieties, 473
 - high-yielding varieties, effects in Asia, 53–5, 57
 - in Punjab, 227
 - income distribution effects, 474
 - negative effects, 254
 - planning for future campaigns, 473–6
 - scale-neutral effects, 188
 - uneven take-up, 113
 - varieties for adverse conditions, 475
- Guinea, 64
- Gwyer, G., 530
- Haebler, C., 559
- Haines, Michael, 303
- Hardaker, J. B., 470, 479
- Hawkins, M., 293, 316
- Hayami, Yujiro, 109, 137, 595, 598, 601, 606, 607
- Hedley, Douglas D., 479, 587
- Henrichsmeyer, W., 47, 499, 591
- Herath, H. M. G., 78, 138, 402
- Heyer, Judy, 594
- Hillmann, Jimmye S., 519, 529, 606, 607
- Homem de Melo, Fernando, 241, 266
- Hondai, Susumu, 151, 591
- Hossain, M. D. Moazzem, 193
- Howe, C., 469
- Hrabovsky, J.P., 479, 499
- Hsi-Huang Chen, 290
- Hughes, G.O., 479
- Hungary, 100
 - private and socialist farms, 101
- Hyams, Edward, 10
- Income distribution, 26, 94
 - among Belgian farmers, 327
 - among family units, 151
 - Brazil, disparities between farm groups, 355–6
 - disparities, 333
 - identification, 344
 - in Japanese agriculture, 339–41
 - persistence, 345–6
 - effect of education, 322
 - effect of increases on food demand, 209
 - effect of off-farm employment, 373–4
 - effects of technological change, 241, 476
 - equity, 346
 - factors affecting, 321
 - from collective farms, 234–5
 - in Africa, 72–3
 - in developed countries, 330
 - in developing countries, 139–51, 470–9
 - stages of research, 140–8
 - in Thailand, 457–9
 - inequalities, 467–8
 - intersectoral disparities, 334, 343–4
 - Kuznets curve, 333
 - Mexico, regional differentials, 445–53, 454, 455
 - technological change effects, 471
 - trend in inequalities, 163
- India
 - agricultural development in Punjab, 217
 - changes in farm households, 405
 - economic strategy, 45
 - landless groups, 383–4
 - population growth, 405–6
 - rural labour force, 387–90
- Indonesia, 594
 - cassava, demand and supply of, 276
 - corn: demand, 270
 - production, 276
 - economic growth, 45
 - plantations, 365, 366
 - poverty, 156
 - rice: demand, 268
 - production, 273, 275, 277
 - rural development policy issues, 419–20
 - rural development programmes, 420–3
 - transmigration, 421–2
- Infrastructure, 181
 - distributional effects, 182
 - effects of inadequate investment, 221
 - farm-level effects, 182–3
 - growth and equity implications, 187–8
 - over-investment, 193
 - relationship with productivity, 186–7
 - see also* Communications; Transportation
- Institutional economics, 177–8
- Institutional structures, 256
 - and natural resource usage, 262–3
 - and technology, 257
 - at international level, 258–9
 - at national level, 258
 - operating rules, 256–7
- Integrated Rural Regional Development (IRRD), 25
- International Association of Agricultural Economists (IAAE), 20
 - value of conferences, 592–3
 - without political bias, 21
- International Bank for Reconstruction and

- Development (IBRD), rural development policy, 418
- International Emergency Food Reserve, 209
- International Institute for Applied Systems Analysis (IIASA), Food and Agriculture Programme (FAP), 574–86, 587–9, 590
- International Labour Office (ILO), studies of rural poverty and agrarian policies, 63
- International Monetary Fund (IMF), Food Financing Facility, 208–9
- International Union for Conservation and Natural Resources (IUCN), 11
- Irrigation
 - and uptake of technological improvements, 113, 115
 - in Asia, 192
 - investment, 191
 - of rice in Indonesia, 276
- Islam, Nurul, 197, 239, 594, 598
- Ismawan, Bambang, 467
- Italy, land tenure patterns, 436
- Ivory Coast, 70, 73
 - export crops, 74
- Japan
 - agricultural development, 217
 - agricultural policy, 512
 - income distribution, 329
 - intersectoral income inequalities, 335
 - land reform, 230
 - rural development programmes, 413
 - urban v. rural way of life, 335, 347
- Jeung Han Lee, 357
- Johnson, Glenn L., 592
- Johnson, Sherman, 14
- Johnston, Bruce, 165, 405, 441, 600, 601, 602, 603, 605, 607
- Jones, Arthur, 593
- Just, R. E., 120, 137

- Kada, Ryohei, 369, 402, 420
- Kako, Toshiyuki, 190
- Kasryno, Faisal, 177
- Kahal, H. S., 226
- Kenya, 64, 70, 73, 560, 571
 - agricultural development policies, 566–8
- Khan, A. R., 229, 239, 600, 603
- Kim, Sung-hoom, 162
- Kinsey, B. H., 179, 192
- Koester, Ulrich, 529
- Konjing, Chaiwat, 542
- Korea
 - agricultural development, 217
 - land reform, 230
 - poverty, 156
- Krongkaew, Medhi, 456, 468
- Kumar, K. S. Arun, 193, 316, 402

- Lacombe, Philippe, 343
- Lagemann, J., 278, 291
- Land
 - Asian inequalities, 229
 - definition of 'landlessness', 380–5
 - distribution, in African countries, 73, 74
 - infrastructure development, 191
 - policy, in Brazil, 353
 - population pressure, 110
 - reform: and institutional change, 230–1
 - effect of policies, 132
 - implications in socialist countries, 233
 - in Asia, 55, 57, 237–8
 - in newly industrializing countries, 33
 - link with technological change, 477
 - tenure: effects on European agriculture, 435–7
 - efficiency and equity related to, 430–1, 439–40
 - exploitation in landlord-tenant system, 440–1
 - in Europe, 429–30
 - in UK, 431, 433–4
 - legislation and policies, 441
 - size of unit, 440
 - use: conservation strategy, 14
 - European, 80
 - Nigeria, 362
- Latin America
 - poverty, 156
 - urban growth, 471
- Leavitt, S., 293, 316
- Lee, J. Y., 602
- Leiserson, Mark, 139, 164, 602
- Lesotho, 72
- Less developed countries (LDCs)
 - agricultural policies, 512
 - disadvantaged by growth in developed economies, 514
 - effects of recession, 23
 - filling labour-intensive industry needs, 46
 - imported technologies, 527
 - performance, 31
 - policy evaluation, 120–1
 - problems for development, 50
 - research and development expenditure, 522–3
 - technology transfer, 523–4

- Leupolt, M., 469
 Lewis, Sir Arthur, 22
 Lewis, Jack, 12
 Liem Huy Ngo, 426
 Lithuania, 102
 Longworth, John W., 531, 558, 607
 Lynam, John K., 470, 600, 606
- Mahalanobis, P. C., 219, 226-7
 Malawi, 64, 70, 560, 571
 agricultural development policies, 566-8
 Malaysia, 52
 corn demand, 270
 economic growth, 45, 55-6
 ethnic imbalance, 156-9
 poverty, 156
 rice: demand, 268
 imports, 273
 Mali, 64, 70
 Mangahas, Mahat, 153, 164
 Market economies
 income problems for agricultural population, 505
 price mechanism, 504
 Mao Zedong, 232
 Market mechanisms, 293
 to accelerate agricultural growth, 294-302
 Marketing
 agricultural, compared with industrial, 307
 approaches to, 306
 business, concept of, 307-8
 conventional approaches, 310-11
 effect on agricultural development, 311-13
 FAO bibliography, 315
 firm-orientated, 308-9
 importance to agriculture, 303
 information, 316
 policy, 306-10
 producer-controlled, 298
 Marketing boards
 necessity for small producers, 304
 'public interest' factor, 309
 Martin, J. F., 499
 Maruta, Sohei, 264
 Marx, Karl, 233, 238
 Maunder, A. H., 429, 441
 Mechanization
 effect on incomes, 331
 see also Technological change
 Mellor, John W., 216, 239, 594, 600, 605, 606, 607
 Mexico
 agricultural development, 443-5., 468-9
 ineffectiveness of government programmes, 453-4
 regional income inequalities, 445-53
 rural-urban migration, 448-53, 454, 455
 urban population increases, 471
 Meyer, R. L., 266, 402, 469
 Misawa, Takeo, 180
 Modelling
 agricultural development, 224
 CMEA agricultural development, 488-90
 CMEA agricultural production, 498, 499
 development of techniques of, 587
 economic development, 219-20
 Food and Agriculture Programme (FAP) of
 IIASA, 575, 576-86
 of equity and efficiency, 120-34
 rural-agricultural sector, 166-80
 Molla, R. I., 368
 Monetary co-operation, 517, 518
 Monke, Eric A., 137, 519, 529, 607
 Mozambique, 71
 Mubyarto, M. R., 400
 Multilateral Trade Negotiations (MTN), 537-8
 Multiple cropping, 52
 Munro, David, 11
 Mustapha, Zulkifly Hj., 439, 590
 Myrdal, Gunnar, 25
- Natural resources
 aiding development, 43
 effect of institutional structure, 262-3
 errors in economic activities, 263
 importance to economic growth, 50
 in rural development, 172
 political aspects of use, 179
 price structure, 255-6
 rates of use and investment in, 260-1
 related to institutional structure, 265
 significance, 260
 use decisions, 260
 need for policy changes, 266
 Navarro, L. A., 278, 291
 Nazarenko, Victor, 97, 605
 Netherlands, 79, 87-8
 land tenure pattern, 436
 New Zealand
 agricultural policy, 511-12
 marketing controls, 311
 Newly industrializing countries (NICs)
 growth, 31-3
 methods of achieving, 42
 import substitution, 48

- importance of exports, 47–8
- non-tariff barriers, 42
- social equity in economic growth, 49
see also Colombia; Philippines; Taiwan
- Niebuhr, Reinhold, 608
- Nigeria, 70, 71, 73
 - dominance of capitalist farmers, 360
 - export crops, 74
 - land reform, 359–60, 367
 - traditional farming, 362
- Nishimura, Hiroyuki, 498
- Non-tariff barriers, 203
- Norby, R., 293, 316
- North America
 - fluctuations in cereal production, 207
see also Canada; United States
- Norway, income distribution, 329

- Ohkawa, Kazushi, 22, 27, 597, 608
- Organic farming, in conservation strategy, 14

- Paarlberg, Don, 105, 348
- Padilla, H. J., 240
- Pakistan
 - economic strategy, 45
 - landlessness, 385
 - livestock holders, 393
 - rural labour force, 391–5
- Palmer, V., 479
- Parikh, Kirit S., 240, 530, 574, 590
- Parlberg, D., 559
- Penny, D. H., 266, 364
- Pensions, in COMECON countries, 100
- Peru, economic growth in, 45
- Pesticides, chemical, in conservation strategy, 15
- Peters, George H., 105, 240, 429, 441
- Petit, Michael, 180, 237, 266, 559, 607
- Philippines, 45
 - as example of newly industrializing country, 33
 - corn: demand, 270
 - production, 275, 276
 - economic performance, 37
 - factors critical for growth, 50
 - import substitution, 40
 - population staying in agriculture, 41
 - poverty, 156
 - rice: consumption, 268
 - imports, 273
 - Social Weatherstation Project, 159–60
- Piggott, R. R., 317
- Pigou, A. C., 27
- Plant breeders, 16
- Plunkett, Sir Horace, 21
- Pollution
 - and agricultural strategies, 224
 - control in conservation strategy, 15
- Population growth, 110–11
 - and food production, 213
 - in Europe, 79–80, 87, 94
 - India, 405–6
 - land infrastructure development, 191
- Poverty, 24, 152
 - alleviated by new technology, 52, 57
 - basic needs, 417
 - complexity of problem, 427
 - factors in alleviating, 467
 - in ASEAN countries, 154–6
 - in Asia, 52
 - in developing countries, 405
 - in Nigeria, 361–3, 364
 - in South Asia, among landless, 379–400
 - in Thailand, 457–9
 - landless poor, failure of research to date, 401
 - monitoring, 161, 163
 - value judgements, 415–16
- Prabowo, Djoyo, 267, 291
- Prices
 - and marketing boards, 310
 - decline and real values, 517
 - discrimination, in marketing, 308
 - effect of infrastructure costs, 183
 - effect of technical change, 242–4
 - European, 80
 - in World War I period, 81
 - instability, 205
 - mechanism in market economies, 504
 - objectives for food grains in East Africa, 563–6
 - policies, 136, 331–2, 508, 529
 - effects, 560
 - in Asian agriculture, 58
 - in Finland, 326
 - in socialist countries, 103
 - price-income, 503–6
 - stabilization schemes, 131
 - relative, for natural resources, 262, 265
 - stabilization systems, 316
 - system: in mature market, 293–4
 - in socialist countries, 101–2
- Processors, effect on producers, 299, 303
- Productivity, technical change and human capital factors in, 190
- Protectionism, 507, 508
 - problems caused by, 510
 - through price interventionism, 310
 - see also* Non-tariff barriers

- Raeburn, John, 593
- Ranis, Gustav, 31, 598, 605

- Rausser, G.C., 120, 137, 598
- Recession, effects of, 22
- Reisigg, Finn, 593
- Resource allocation, 181
 - effect of technical change, 242-4
 - trade-offs in rural development programmes, 416
 - see also* Natural resources
- Reyes, Saúl Trejo, 443, 468, 600-1, 606, 607
- Risk aversion
 - and new technology, 291
 - modelling, 123, 133
- Robbins, Lionel, Lord, 17
- Rossetti, D., 348
- Ruf, M., 348
- Rumania, 100
- Rural-agricultural sector
 - economic relations with urban-industrial sector, 173-5
 - multidisciplinary model, 171-3
 - underemployment in South Asia, 401
 - variety in definition, 179
- Rural development
 - analysis, 406-9
 - Australia, 535
 - changing conditions, 22
- Rural development - *continued*
 - co-operation with non-governmental organisations, 427-8, 442
 - definition, 167-71, 423
 - equity issues, 60
 - growth and equity trade-off, 116-17
 - IBRD policy, 418
 - in Taiwan, 34
 - Indonesia: policy issues, 419-20
 - reasons for successes and failures, 423-4
 - institutions, 178
 - labour force composition, 385-7
 - Mexico, targets of expenditure, 450
 - modelling, 166-80
 - off-farm employment, 369-71, 376-7
 - in Indonesia, 422
 - role in process, 373-4
 - options, 424-5
 - organizational structure, 428
 - policy requirements, 61
 - political and social dimension, 23-4
 - political problems, 409-11
 - problems of landless poor, 380
 - programmes, 441
 - aim, 405
 - optimal complexity, 415
 - pitfalls, 410, 413
 - social indicators, 417
 - social justice objectives, 97
 - social services, 411
 - strategy, 411-14, 515
 - target groups, 426-7
 - Thailand, 456-66
- Sakiur, Seiji, 479
- Sanders, John H., 470, 600, 606
- Sargent, Frederic O., 166, 603, 607
- Saxon, E. A., 77
- Schultz, T.W., 12, 26, 181, 190, 324, 607
- Scott, Sir Peter, 11
- Senegal, 70, 73
 - export crops, 74
- Sering, Max, 22
- Sharma, Ramesh, 479, 499
- Shiraishi, Masahiko, 276
- Sierra Leone, 72
- Singapore
 - corn demand, 270
 - rice: consumption, 268
 - imports, 273
- Singh, Inderjit, 379, 402
- Siwar, Chamhuri, 453
- Slater, J. M., 368
- Soares, Fernando Brito, 545, 558, 607
- Social expenditure, 164-5
- Social indicators, 163-4
 - in ASEAN countries, 153
 - of rural development, 417
- Social policy, and agriculture, 26
- Socialist economies, 97-103
 - see also* Council for Mutual Economic Assistance (CMEA)
- Soil erosion, 27
- Somalia, 71
- Sondath, L., 469
- South Africa, 71
- Soviet Union, 97
 - agricultural development strategy, 219, 226-7
 - agricultural policy, 512
 - Food programme, 97, 100
- Soybeans, Brazilian improvements, 244-6
- Stanton, B. F., 559
- Steigerwald, V., 479
- Subsidies, 131
 - Brazil, 350, 352, 353
 - Finland, share related to farm size and location, 327
- Subsistence threshold, 161
- Sudan, 64, 72
- Sugai, Y. Oshihiko, 349, 367, 600, 606, 607
- Suzzi, Y., 348
- Swaziland, 64
- Sweden, 79, 87-8
 - agricultural output, 82

- Switzerland, income distribution, 328
- Taiwan
 agricultural development, 217
 economic growth, 48
 economic performance (1950–80), 35
 example of East Asian newly industrializing country, 33
 export substitution, 38
 factors critical to growth, 50
 food production, 34
 inequality measures, 120
 labour-intensive technology, 39–40
 land reform, 230
 off-farm rural employment, 372
 rural development programmes, 413
- Tanzania, 70, 71, 72, 560, 571
 agricultural development policies, 566–8
 rural development systems, 75
- Tarditi, S., 116, 530, 559, 595
- Taxation
 in Brazil, 354
 in Soviet Union, 102
 to control environmental impact, 15
- Technological change
 adoption, 123, 475
 agricultural production improved, 216
 and institutional structures, 114, 257
 and small-farm production, 291
 appraisal, 117–18
 appropriateness, 519
 as function of infrastructure, 184
 Brazilian research, 354
 choice of research projects, 114–15
 disadvantages, 136
 distribution effects, 241
 effects, 111–12
 of widening income disparities, 325
 on human nutrition, 253
 on income distribution, 471
 on large and small firms, 347
 on productivity, 190
 equity implications, 222–3
 growth and equity trade-off, 109
 importance for economic growth, 241
 in Australia, 534
 in Brazil, 244–9
 in CMEA countries, 481–2
 in food crops in Central America, 280–2
 in semi-open economy, 243
 induced innovation, 521–3, 526
 influence on income distribution, 476
 input from research institutes, 525–6
 link with land reform, 477
 ‘Pareto safety’, 263
 quantitative models, 529
 rate of return, 243
 research and development expenditure, 522
 resource use and price effects, 242–4
 response of Central American farmers, 288
 techniques and technologies differentiated, 520
 technology transfer, 523–7
 see also ‘Green Revolution’
- Teixeira, A. R., 600, 607
- Terms of trade, in market economies, 85–6
- Thailand
 corn exports, 275
 economic growth, 45
 off-farm rural employment, 372
 poverty, 156
 and income distribution, 457–9
 rice: consumption, 268
 exports, 273, 275
 rural development programme, 456–66, 468–9
 Rural Job Creation Project, 456, 459–66, 467
- Third World, *see* Less developed countries (LDCs);
 Newly industrializing countries (NICs)
- Thomas, Edgar, 593
 Thomas, Wat, 593
 Thompson, R. L., 193
 Thomsen, R., 530
 Togo, 64, 70
- Trade
 export earning fluctuations, 205
 liberalisation, in agriculture, 205
 policies: Australian, 537–9, 540
 future requirements, 516
 interrelations with agricultural policy, 507–10
 link with price-income policies, 539–41
 objectives, 506–7
- Transportation
 costs, effect on prices, 183
 effect of improving, 190–1
 in Indiana, 192–3
 used by all farmer groups, 191
- Tropical Agricultural Research and Training Centre (CATIE), 278
- Tuma, T., 368
 Tyagi, D. S., 479
 Tyler, G.J., 266
- Uganda, 71
 Uncertainty, modelling, 123

- see also* Risk aversion
- United Kingdom, 79, 87–8
 agricultural output, 82
 land tenure, 431, 433–4
 effect of patterns, 435–7
 marketing boards, 311
- United Nations
 Environmental Programme (UNEP), 11
 Food and Agriculture Organization (FAO), 11, 12, 204
 International Undertaking on World Food Security, 208
- United States, 79, 87–8
 agricultural output, 82
 commercial agriculture, 167–8
 farm policy, 511
 GDP per worker, 84
 grain prices, 80
 marketing, 311
- Upton, M., 348, 402
- Urbanization process, 171–2
- Usoro, Eno J., 359, 367
- Van der Meer, C. L. J., 79, 348, 598–9, 606
- Venezuela, economic growth, 45
- Verma, B. N., 78, 105, 255, 266, 607
- Viallon, M., 348
- Vyas, V. S., 52, 599–600, 607
- Wages
 in Europe, 80
 in socialist countries, 99
- Wallace, Henry, 17
- Warren, G. F., 22
- Watson, A. S., 306, 316
- Weber, Adolf., 138, 530
- Webster, J. P. G., 346
- Weher, Adolf, 165
- Weisblat, Abe, 606
- Welfare policy
 and low income groups, 321
 programmes in Australia, 535
- Westermarck, Nils, 321, 346, 593, 599
- Western Sahara, 71
- Wicks, J. A., 469
- Wills, Ian, 266
- Witzte, H. von, 138
- World Bank, study of African agricultural policies, 63
- World Conservation Strategy, 11
 criteria for deciding policy priorities, 13–14
- Yamada, Saburo, 333, 346, 600
- Yang Boo Choe, 59, 240, 348, 530
- Yields, decline in African crops, 65
- Zambia, 70, 72, 560, 571
 agricultural development policies, 566–8
- Zilberman, D., 120, 137
- Zimbabwe, 71
- Zohlnhoefer, Werner, 368., 555