KENYA'S RURAL RESEARCH PRIORITIES

Proceedings of a Seminar Held at Safariland Lodge, Naivasha
28 - 30 April, 1988

1989 c Edited by A.C. Ackello-Ogutu

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UNIVERSITY OF NAIROBI

- Department of Agricultural Economics
- Institute for Development Studies
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PREFACE

These proceedings come out of a seminar held at Safariland Lodge (Naivasha), 28 - 30 April, 1988. The convenors of the seminar were the Institute for Development Studies (IDS) and the Departments of Agricultural Economics, Economics and Sociology: all of the University of Nairobi.

The seminar was based on the premise that the rural social sciences are basic to many of the perennial fundamental issues of economic development. These include key issues such as trade strategies and natural resource policies as well as tasks ranging from enhancing efficiency of the marketing system to dealing with social stresses which impinge on the family and community as a result of economic development.

The possible research agenda and the potential contribution of the rural social sciences to the urgent task of economic development is large, while the resources which are available to devote to the task are extremely limited. The specific objective of the seminar was therefore to develop rural research priorities and also to derive an intermediate to long term strategy for facilitating effective contribution of the social sciences to the process of economic development.
What is contained in this volume should be found useful not only to researchers in academic fields but also to policy makers, donor agencies and graduate students seeking suitable research topics in rural development.

The proceedings place more emphasis on the priority research areas suggested by the plenary presentations and working groups than on the floor discussions which helped mainly to shape and narrow them to their current form.

We are grateful to the Ford Foundation for making the seminar possible through a generous grant given to the convenors in September 1985 for a Rural Social Science Program at the University of Nairobi. We are also indebted to Winrock International for its unfaltering commitment to the promotion of rural social science research in Kenya as well as in other parts of the developing world.

As Seminar Coordinator and Proceedings Editor, I must thank Professors K. Kinyanjui (Director, IDS) and John J. Waelti (Winrock International Associate) for working tirelessly not only for the success of the seminar but also for the success of the overall Rural
Social Science Program. It is my hope that all the seminar participants enjoyed the experience and that many more will hereafter find practical use for these proceedings.

Dr. A.C. Ackello-Ogutu
Senior Lecturer and Chairman
Department of Agricultural Economics
University of Nairobi

November, 1988
A. INTRODUCTION: SESSION I

Chairman - Dr. C. Okidi

1. The Seminar Coordinator, Dr. Ackello-Ogutu, welcomed the participants and then went on to explain that the purpose of the seminar was to identify and discuss areas of research priority requiring the attention of social scientists in Kenya during the next decade. He expressed the satisfaction that the majority of social science disciplines with significant roles in rural development were well represented at the seminar and that there was every possibility of coming up with a fairly precise research agenda within the short duration of the seminar. It was hoped that the discussion groups would delve into more detailed expositions of institutional interrelations and areas of research, with the plenary sessions laying the foundation with general philosophical discussions and remarks.

2. Following the short remarks by the Seminar Coordinator, the Chairman, Dr. Okidi, called upon the Principal of University of Nairobi's College of Agriculture and Veterinary Sciences, Professor G.M. Maloiy (representing the Vice-Chancellor of University of Nairobi, Professor P.M. Mbithi) to officially open the Seminar. Professor Maloiy thanked
the Ford Foundation for providing the grant which made it possible to convene the Seminar. He also acknowledged with appreciation, the efforts being made by Winrock International in the promotion and coordination of social science research in Kenya. The Vice-Chancellor's speech read by Professor Maloiy stressed the following points:

(i) the need for support and coordination of continuous rural sciences research in Kenya which should reflect the national development priorities;

(ii) incorporation of a mechanism for disseminating research findings within the social science research framework;

(iii) intensification of training of social scientists in order to meet the top-level manpower demands in research.

3. After the thought-provoking speech, Professor Maloiy then declared the Seminar officially open. Dr. Okidi thanked the Principal for taking time off his busy schedules to come and open the Seminar. With the brief ceremonies over, the floor was now open for the invited disciplinary papers.
B. PLENARY PRESENTATIONS: SESSION II

Chairman - Dr. C. Okidi

4. Five papers were presented during the second session with representatives coming from the Institute for Development Studies, Departments of Sociology, Economics and Agricultural Economics (all from the University of Nairobi) and the Development Planning Division of the Ministry of Agriculture. Although time for consultations within these institutions was limited, the authors' academic and research experience assured the validity of their opinions and their ability to impute the research needs of the institutions they represented.

5. The first presentation was by Dr. P. Alila of the Institute for Development Studies. He outlined the perceptions of rural development that have led to the current interest in research on rural development including the popular interest on the subject by policy makers. He pointed out that research must be undertaken within a dynamic framework since the priority
issues are likely to change over time. The need for collaborative interdisciplinary research was also emphasized but the logistics of such collaboration, which continue to be a matter of great concern to many researchers, was left open for deliberation by seminar participants.

6. Social scientists should develop appropriate theoretical perspectives in order to capture as many variables as possible in their research. In particular, highly developed organizations are needed to deal with new technologies (e.g. high yielding crop varieties) if progress is to be made, and such a factor needs to be recognized in social science research. Overall, there must be unity (harmony) in research in order to take into account the work being done by other scientists. Thus, the models used by social scientists should be broad-based, taking into account political, social, economic and technical issues.

7. Dr. Alila mentioned the following broad categories as constituting the priority areas of research aimed at rural development in Kenya:

(i) food production and availability
(ii) cash crop production
(iii) livestock production
(iv) farm inputs: availability and use  
(v) commercialization of agriculture  
(vi) agricultural pricing and marketing  
(vii) agricultural extension and training needs  
(viii) land tenure and use  
(ix) irrigation  
(x) rural employment  
(xi) population, settlement and distribution  
(xii) the role of women and other disadvantaged groups in rural development  
(xiii) institution building  
(xiv) technology development and dissemination

8. The second presentation was given by Dr. E.K. Mburugu (Department of Sociology) who stated that it is imperative to consider the human factor in rural development, especially in a country like Kenya where about 80% of the population lives in the rural areas. He outlined the various perceptions of rural development and stated that the focus should be on what benefits the majority of the population from a sociological point of view. He also stated that the side effects of rural development should be considered. The major research areas requiring sociologists' input could therefore be stated broadly viz:
(i) the relationship between agricultural development and population;
(ii) how rural incomes are utilized;
(iii) alternative uses of time by rural people as labour-saving innovations are adopted;
(iv) impact (and side effects) of rural development--focusing on both positive and negative aspects.

9. The third presentation was by Mr. J. Kamunge of the Development Planning Division, Ministry of Agriculture. His paper singled out food and health to be the most deserving of social science research with the overall objective being the alleviation of hunger and ill-health. In trying to solve general problems of food and health, a number of more specific agricultural and development questions may be answered through research in areas such as:

(i) land reform policies and their effects on production and trade;
(ii) pricing and trade policies and their effects on efficiency, distribution and rural development;
(iii) rural development projects: how to make them more successful and beneficial to rural communities.
10. The fourth presentation was by Dr. K.K. Mukherjee of the Department of Economics. His presentation emphasized the crucial role played by marketing in agricultural development. The crisis in agricultural development in many developing countries, he contended, could be attributed to the following factors, among others:

(i) unrealistic price and trade policies;
(ii) cumbersome or poor distribution policies;
(iii) rural - urban migration, primarily due to lack of employment in rural areas;
(iv) unfavourable terms of trade for the rural areas;
(v) changes in consumption habits;
(vi) distortions due to official policies;
(vii) high population growth rates, leading to a slow-down in resource availabilities;
(viii) deterioration in the environment;
(ix) stagnation in technology development.

Whereas all of the above factors provide fruitful areas for research in rural development, Dr. Mukherjee's paper singled out agricultural marketing as one of the areas with the highest return per shilling spent on research. Social scientists should attempt initially to answer questions related to the following aspects of agricultural marketing.
(i) farmer's share of the consumer's expenditure and the related concept of gross marketing margins;

(ii) organization of the agricultural marketing system in the country.

The objective of such research would be to find solutions to the problems that have hindered rapid agricultural development in the country.

11. The last plenary presentation was by Dr. O.L.E. Mbatia of the Department of Agricultural Economics. Dr. Mbatia expressed the fear that many research topics suggested by the speakers before him were by no means new and that many of the questions being raised have been researched in this country and in other developing countries yet implementation remains singularly problematic. He therefore suggested that even before embarking on priority research areas, we need to establish what has been done, recommendations which have been made and constraints to implementation. Such an exercise would reduce duplication of research efforts thereby cutting down costs immensely.
12. Dr. Mbatia also noted that a substantial proportion of research funding in Kenya has come from the donor community. The donor community, however, appears to have its own criteria for determining the research needs of the country and hence the development aspects to fund. There is thus a need for round table discussions between the donors and researchers in order to maintain continuity and thus ensure that the research proposals we as researchers suggest are those at the top of donors' funding lists.

13. As far as topical issues for research in agricultural economics are concerned, Dr. Mbatia proposed the following:

(i) production costs for various agricultural commodities;
(ii) factors which make domestic (Kenya) production more costly than the costs of production in other countries;
(iii) role of horticulture focusing on the problem of marketing and the opportunities and constraints in the promotion of the industry in Kenya;
(iv) research on livestock development, especially focusing on the effects of differential pricing;
(v) research on natural resources, especially on land and the impact of land tax on land use and productivity;
(vi) rural employment problem;
(vii) the problem of farm inputs, especially fertilizers, focusing on use and availability;
(viii) research on institutions, focusing on their role in agricultural development;
(ix) the problem of technology development and transfer, with special emphasis on the role of extension services;
(x) the terms of trade between agriculture and the rest of the economy.

In his concluding remarks, Dr. Mbatia proposed that research should be undertaken on an on-going basis. He also felt that research methodology is a major issue, since rural development research calls for collaborative research.

14. At the end of plenary presentations, the Session Chairman, Dr. C. Okidi, made a few remarks on the presentations before closing the second session. He observed that the papers presented had highlighted the evolution of thought and practice in rural development. He noted that it is important to define the development
goals before one can determine research priorities because such priorities cannot be determined without clear perceptions of the needs of the rural people. It is also important to identify who are the most seriously affected and also to assess the kind of resources available to meet the development goals. He further noted that management of resources is a crucial factor if the goals of rural development are to be met.

15. Rural development invariably results in some changes in the social system. It is therefore important to assess the consequences of the changes associated with rural development, both positive and negative, as already highlighted in the plenary papers. Further, identification of factors that have led to success or failure of some of the rural development projects in the past would help us formulate better strategies for promoting efficiency in agriculture and the organizational structure of our production in future.

16. In concluding, Dr. Okidi concurred with the view expressed in the plenary presentations to the effect that we need to assess where gaps exist in knowledge so that researchers can assist policy makers
in filling the gaps and identifying critical policy areas hitherto untouched. The question of who controls research and research priorities is also important, and the issue raised by Dr. Mbatia concerning research and donor collaboration in determining research priorities is highly pertinent. The Chairman finally closed the session with a reminder that there are also some external non-rural factors that influence rural development. Such factors should be taken into account by social scientists when designing a research agenda.
C. PLENARY DISCUSSIONS: SESSION III AND IV

Chairman - Dr. J. Gingerich

17. The Chairman introduced participants to the discussion sessions and explained that the objective was to have an open exchange of ideas reflecting on the content of the presentations of the second session. Key discussants started off the debate.

(a) Dr. Awuondo Odegi felt that the papers had identified broad areas of research but a way of tying up the various issues needed to be worked out. He observed that there appeared to be a problem in technology transfer and also stressed the need for developing technologies relevant to the arid and semi-arid areas of Kenya.

(b) Mr. Z.J. Mwangi expressed his concern about the gap between the amount of research being undertaken and the pace of implementation of research recommendations. He felt that a mechanism to enable planners and policy makers to utilize research information needs to be worked out. He also felt that we need to evaluate our policies on (i) the exchequer
allocation to research and development, (ii) subdivision of land holdings, and (iii) exporting of our raw agricultural/livestock materials, with a view to establishing their appropriateness.

(c) Dr. Rocheleau felt that the accountability of researchers depends on whether they are leaders or followers. The methodology adopted by social scientists, she noted, should lay some emphasis on micro-level rural research only in so far as this enables us to address the broader national issues. Dr. Rocheleau stressed the need to disaggregate information so as to be able to identify who gains or loses from a given policy intervention, possibly on the basis of activities and gender.

(d) Miss. J. Gachagua concurred with the views expressed in the lead papers, and by the discussants before her. She felt that an understanding of the needs and aspirations of the rural people was a prerequisite for developing appropriate extension packages for rural development.
(e) Mr. Njiru also expressed the familiar desire to convince policy makers of the necessity and importance of the research findings. He felt that the time had come when possibilities of financing research on different commodities from levies (or cess) on these commodities should be explored. This would enable us to avoid "internationalizing" our research efforts, a situation which must persist as long as we continue to depend on donor agencies for research funding. Emphasis should be on developing technologies with maximum social benefits and how to translate policies into development.

After the lead discussants had made their comments, the Chairman invited other participants to give their reactions to the seminar.

18. The seminar participants generally agreed with the issues which had been identified as constituting the priority areas for research on rural development. However, the list of issues already identified could be extended to include:

(i) evaluation of the trends in the provision of social welfare at household level;
(ii) shifts in labour utilization, focusing on mobility of labour within the rural areas;
(iii) water resource economics, focusing on tenure over water for irrigation as a factor in rural development;
(iv) fisheries as a resource in rural development;
(v) issue of energy and other natural resources, including forestry and agroforestry development;
(vi) role of education in rural entrepreneur development
(vii) identification of research inhibitors: the social scientists have limited time to undertake research for rural development and it is important to identify ways in which their research input can be optimized.

19. The seminar participants also felt that one cannot restrict the length of the list of priority areas of research for rural development due to the diversity of rural communities and their needs. Variations in research methodologies should not therefore be viewed as a problem. Emphasis should instead be directed to finding out the best ways of utilizing the research findings. Realizing that about 80% of Kenya's land area is within the so-called arid and semi-arid lands (ASAL), the seminar participants unanimously felt that there was a need to devise appropriate policies and to help people settle in the ASAL.
20. At the end of the plenary discussions, seminar participants were divided into six Working Groups, each with a specific subject for which the priority issues for research were to be identified. The six Working Groups were as follows:

- **Group I**: Commodities
- **Group II**: Technologies and Practices
- **Group III**: Human Resources
- **Group IV**: Natural Resources
- **Group V**: Commerce and Rural Industrialization
- **Group VI**: Economic Policies

21. The Chairmen and Rapporteurs of the Working Groups were:

- **Group I**: Chairman, Dr. Maritim
  Rapporteur, Mr. Shihemi
- **Group II**: Chairman, Dr. Yambo
  Rapporteur, Dr. Masai
- **Group III**: Chairman, Dr. Riak
  Rapporteur, Dr. Ng'ethe
- **Group IV**: Chairman, Prof. Waelti
  Rapporteur, Mr. Mukumbu
- **Group V**: Chairman, Mr. L.M. Awiti
  Rapporteur, Mr. Kiche
- **Group VI**: Chairman, Dr. Oluoch-Kosura
  Rapporteur, Mr. Nyangito
Dr. S.G. Mbogoh, assisted by Mrs. L.N. Kimenye and Mr. G.M. Rubiik, remained the overall Seminar Rapporteur throughout all the sessions.
D. WORKING GROUPS: PRESENTATIONS AND DISCUSSIONS:
SESSION V

Chairman - Mr. J.B.W. Matata

22. The following sections present the highlights of the priority areas of research on rural development as identified under the different subjects assigned to the Working Groups. Only the major research topics are given as details would have to be given in specific research proposals.

GROUP I: COMMODITIES

23. The term "commodities" was interpreted so as to cover both crops and livestock products. Issues included costs of production and marketing. Storage and distribution problems were given special treatment. Studies on market structures were highly recommended. It was noted that Kenya could easily double its present production levels if improvements in production management, distribution of inputs and marketing of output could be achieved.

The following research priorities were suggested:

(i) survey of existing information in order to help identify a line of action on research programmes, including an identification of gaps in information;
(ii) detailed investigations of production and conservation of fodder and the costing of concentrates for animal feeding;

(iii) economics of home-made concentrates and technological implications;

(iv) economics of the delivery of veterinary services, including an assessment of the role of the private sector;

(v) evaluation of appropriate breeds of animals for different agro-ecological zones and the design and formulation of a national animal breeding policy;

(vi) impact of land subdivision in the rangelands on beef supply, and an evaluation of the possibility of using wildlife as sources of meat;

(vii) impact of wildlife on the spread of livestock diseases and competition for animal feed sources;

(viii) economics of production and marketing of beef and dairy products;

(ix) contribution of small stock to household nutrition and income in relation to the competition from the large stock;

(x) evaluation of feed quality and pricing policy, especially for pig and poultry feeds;

(xi) economics of production and marketing of honey (and wax) in Kenya, including studies on production technologies;
(xii) problem of the production of high quality hides and skins, wool and mohair, including an evaluation of the role of these commodities in generating income in the informal ("jua kali") sector;

(xiii) economics of production and marketing (including consumption) of livestock in the rangelands, including an evaluation of the role of camels in these areas;

(xiv) impact of movement restrictions on the marketing of rangeland animals in Kenya;

(xv) evaluation of duality in food and cash crop production, focusing on identification of suitable cash crops for different agro-ecological zones while considering their impact on food production;

(xiv) investigation of the role of export cash crop production (e.g. coffee, tea, pyrethrum and other horticultural commodities) on the economy, including a study of how to maintain the quality of these commodities to meet international standards;

(xvii) investigation of how the payment systems for various commodities can be streamlined in order to encourage the farmers to produce more and higher quality products;
(xviii) evaluation of utilization and beneficiaries of cash incomes from agricultural production, including an evaluation of the role of women in the production of both food and cash crops;

(xix) evaluation of the structure and performance of commodity markets, including the monitoring of supply and demand in the world commodity markets;

(xx) appropriateness of alternative processing technologies for both crops and livestock products, focusing on impact on consumer utilization, producer and consumer prices, and efficiency and effectiveness of particular technologies;

(xxii) evaluation of the suitability of alternative storage technologies at different stages in the process of marketing, focusing on technologies and structures for reducing storage losses.

GROUP II: TECHNOLOGIES AND PRACTICES

24. The Working Group on technologies and practices identified areas for priority research under four main sub-headings, namely (i) farm inputs, (ii) technology
transfer (iii) current practices and applications, and (iv) research and development. The specific topics are shown below under these respective sub-headings.

(i) Farm Inputs

(a) identification of the different types of inputs, including farm tools and machinery required in different ecological zones and enterprises over time. The main objective would be to establish rates of current use and discrepancies between practice and recommendations.

(b) examination of various types of farm tools and machinery used in various eco-zones in order to determine their appropriateness and possible alternatives, including their availability and the existence of maintenance services. In this case, research should be focused on the various types of tools and machinery especially in relation to farm size, family labour structure and costs.

(ii) Technology Transfer

(a) assessment of effectiveness and efficiency of message delivery systems with respect to various target groups.
(b) identification of the factors which inhibit or promote the adoption of technology.

(iii) Current Practices and Applications

(a) a comparative study of the efficiency of small-scale versus large-scale irrigation schemes.

(b) techniques for improving the existing food (meat and milk) preservation methods, especially in arid and semi-arid lands with a view to improving food security in these areas.

(c) evaluation of the effect of technologies currently being used in rural areas on rural employment, particularly of women and youth.

(iv) Research and Development

Under this sub-heading, the group felt that there is need to evaluate the technology development policy, focusing on the adequacy of funding of research and development activities which are related to rural development. The objective would be for research continuity and relevance over time, an aspect touched upon by various seminar participants.
GROUP III: HUMAN RESOURCES

25. The major issues of concern for research in this case were identified as labour, population, education and training, health services, institutional set-up for welfare services, social services and rural-urban migration, and agricultural education and extension services. As far as possible, research on these issues should look at gender, class and specific regional situations. The group identified the following seven categories of research priorities:

(i) Labour:

(a) identify the nature of the available labour.

(b) examine the determinants of labour supply in rural areas, focusing on:
   - demographic issues, e.g. population growth patterns.
   - who is available in the rural areas?
   - socio-economic composition of labour (age/gender/education level).

(c) examine major determinants of labour demand, focusing on the types of productive activities in specific rural areas (both on-farm and off-farm activities) and their potential to absorb labour.
(d) identify the beneficiaries of labour productivity, focusing on disadvantaged groups as beneficiaries or non-beneficiaries.

(ii) Population:

(a) rural people's perception of population issues:
   - family size/family planning
   - role of household labour and its effects on household labour productivity
   - family size and access to resources/services/education, etc.

(b) factors influencing internal (within country) brain drain, especially focusing on rural-urban migration.

(iii) Education and Training (Both Formal and Informal)

(a) availability of, and access to, education and training opportunities in the rural areas.

(b) attitudes and values inculcated through the educational system and other institutions of socialization, such as households and working places.

(c) effect of socialization on creation of either rural or urban outlook, especially in relation to socialization through schools.
(iv) **Agricultural Extension and Extension Services:**

(a) the linkage between extension and research
(b) the nature and relevance of agricultural education and training.
(c) the extension system's ability to communicate knowledge to potential users, e.g. rural women.
(d) the factors which influence the efficiency and/or effectiveness of extension workers, particularly in relation to working conditions.

(v) **Health Services:**

(a) health care and human resources in relation to the degree to which the resources are available and the patterns of their distribution and the effects of this on, for example, children's health.
(b) health and education, with emphasis on the effect of education on family health.

(vi) **Institutional Set-up for Welfare Services:**

(a) degree to which traditional welfare institutions for the aged, the young, the weak and the
handicapped are eroded. Research should aim at finding ways and means of arresting the declining trends in welfare.

(b) possible alternatives to the traditional welfare institutions. Comparative analysis involving other countries/cultures should be of benefit.

(vii) Social Services and Rural Migration:

In this case, the objective is to examine to what extent the actual or potential availability of social services in the rural areas can help arrest the rural-urban migration. It must, however, be noted that the provision of adequate social services alone may not be the answer to the problem of rural-urban migration. Social services must be combined with other relevant production and pricing policies which constitute another important aspect of research as highlighted in other discussion groups.

GROUP IV: NATURAL RESOURCES

26. The area of natural resources is one of the least researched in Kenya from a social science point of view. Research in this area tends to be more involved
and will generally require large masses of time-consuming data. However, in order to come up with relevant policy recommendations on various aspects of natural resource management and utilization, there will be no short-cut to detailed and comprehensive multidisciplinary studies encompassing areas such as changing use, tenure, legal and institutional aspects as well as competing uses of natural resources.

27. After considering a variety of issues and interrelationships, the group narrowed down their priorities to the following eight broad categories:

(i) energy policy for rural areas:
   (a) pricing policy for available energy resources;
   (b) alternative energy resources accessible to the rural population;
   (c) the impact of petroleum and oil exploitation and development on rural economic activities.

(ii) Water resource policy:
   (a) water tenure and use;
   (b) water supply and delivery;
   (c) public health impact of water supply systems;
(d) determinants of equitable utilization, and the question of water management for agriculture.

(iii) Land/soil resources:
(a) land tenure and the implications of its changes;
(b) land use policies and their impact on rural development;
(c) the impact of alternative agricultural inputs to those presently being imported.

(iv) Fisheries resources:
(a) fish catch efforts;
(b) organization of fishing communities and their efforts;
(c) coastal human ecosystems and their changes.

(v) Forestry resources:
(a) forestry communities and multiple use of forestry resources;
(b) impact of energy policies and their changes on forestry resources;
(c) energy demand and afforestation;
(d) the conflicts of power interests and socio-institutional aspects related to deforestation and the economics of rehabilitation.

(vi) Range and arid lands forestry:
(a) social organization for ecological management in rangelands and arid areas;
(b) interface of grazing management with forest conservation in rangelands and arid areas;
(c) the modalities for afforestation of rangelands and arid areas;
(d) relative advantages of various settlement practices;
(e) tree tenure and sustainable use of range resources.

(vii) Wildlife resources:
(a) the comparative advantages of wildlife farming vis-a-vis agriculture;
(b) the economics of wildlife conservation and its social and economic value without tourism;
(c) the participation of the local people in, and the management of the benefits from, tourism.
(viii) Environmental issues:

(a) the legal framework of natural resource management;
(b) social and environmental impact assessment as a tool for policy formulation;
(c) responsibility and accountability for environmental degradations;

GROUP V: COMMERCE AND RURAL INDUSTRIALIZATION

28. The Working Group felt that commerce and industry covers several activities ranging from trade to manufacturing, processing, extraction and construction. All these activities affect rural development. Time and other resource activities must be considered when setting priorities for research in the field of commerce and rural industrialization. The following four main areas of research were identified by the group:

(i) Finance and Trade
(ii) Agricultural Marketing
(iii) Rural Industrialization
(iv) Rural Informal Sector
(i) Finance and Trade

The rural circular flow of income is a concept that is useful in the analysis of linkage effects of production and consumption units in various sectors. This concept should therefore guide studies to:

(a) Household Income (Finance):

Much of the rural incomes are generated through agriculture and trade. There is also income flow from urban centres in the form of remittances and out of the rural sector in the form of purchases and investments in urban areas. Studies on how agriculture finances itself and development in other sectors are therefore necessary. The impact of injections and leakages in a rural economy multiplier effects needs assessment. Household budget surveys have mainly been aimed at urban areas, yet, for effective economic policy, information is needed on rural household income sources, expenditure and savings behaviour.

(b) Local authorities (LAs) Financial structures need studies especially on budgetary framework, revenue and expenditure determinants and patterns. Tax implications on rural development are issues
which need attention. Financing of development projects has been a difficult task for local authorities. There is therefore need to examine the local authorities' capacity to finance projects and the reasons for failure of some projects.

(c) In the trade sector, it is essential to examine the forms of business organizations and their spatial distribution and efficiency in commodity distribution. Demand and supply studies are limited (if at all available) to consumer goods and the effects of price controls and other regulations on distribution. Issues about the financing of trade are equally important to study.

(d) Financial institutions are important for banking, credit and insurance services. Studies are therefore needed to examine the role of existing institutions, paying particular attention to formal and informal services offered either by the institutions themselves or individuals and groups. Credit availability and the level of demand need to be considered as a guide to credit policy. The co-operative
movement has been instrumental in the mobilization of financial resources, and there still exists hope for its further development. More studies are therefore required to provide information on how best to exploit the idea of co-operatives as a means of reaching larger groups of producers and consumers.

(ii) Agricultural Marketing:

Studies on agricultural marketing have shown that marketing and price incentives are important for increased agricultural production. Rural agricultural marketing systems should be able to adjust and cater for the increasing agricultural output. Agricultural incentives are often associated with certain distortions, hence correct incentives should be ensured. Price policies, for example, affect the nature of income distribution, resource allocation and composition of output, adoption of new practices and the level and pattern of consumption. The specific issues that should be addressed are outlined below:

(a) The overall efficiency of the marketing systems for different products need periodical evaluation. Perhaps a more appropriate approach would be that of considering commodities which have hitherto
received the least attention. But frequent review studies are needed for the traditional commodities such as milk, horticultural produce, poultry, beef and the cereals which are vital for national food security.

(b) State intervention in agricultural marketing is a subject that has remained debatable at policy level. It is important to know when there should be intervention and for what reasons. Even where it is necessary to have state marketing, it is important to examine how best marketing goals could be achieved through such a mechanism. Existence of parallel markets with wide farm price variations over seasons and across farms and regions needs some justification. Related to state marketing are issues on the effects of payment and distribution structure for agricultural products and factors of production.

(c) Export marketing studies are needed to provide information on how best export incomes can be increased, either through the prices or through increased production and high quality exports. World market trends should be surveyed taking into account the impact of world prices on domestic prices,
effects of foreign exchange fluctuations on real earnings, and the distribution of incomes from exports. Apart from the traditional exports, Kenya has a potential for increased horticultural exports. And structural reorganization and trade policies could still improve farm incomes for small producers of coffee and tea.

(d) Farm inputs are basic to agricultural production. Hence their availability should be ensured at the correct time. Information on farm inputs supply and demand structure needs to be generated to guide input production and distribution policies. Implications of escalating input prices on production costs and input utilization raise issues of possibilities of input substitution for both the small holdings and the large farms. The inputs to be studied include improved seeds, fertilizers and other chemicals, farm machinery, tools, fuel and hired labour.

(e) Case-oriented and micro-level studies on farm household marketing decisions are basic to the understanding of some marketing problems. Certain problems that have been observed include:

- on-farm storage decisions and implications on prices and risks of losses.
- losses due to lack of price information and other imperfections on standardization and grading.
- crop and livestock inventories are sometimes maintained either for speculation or as security against certain risks. This phenomenon needs investigation, especially for the small scale farmers. Relationships between future prices, storage costs and interest rates should be investigated along with post-harvest risk behaviour.
- issues relating to commodity supply stabilization have received less attention. The existence of regional shortages and surplusses needs investigation for some essential commodities such as maize, sugar and rice.

(f) Pricing policy and administration go together with other aspects of marketing. Distortions resulting from various price policies should be examined focusing on issues like the terms of trade, resource allocative efficiency, taxation and subsidies, producer and consumer welfare.
- administration of a pricing policy is not easy: the costs are sometimes high, and the best pricing norms should be encouraged. These would require studies on price policy options and their effects.
(iii) Rural Industrialization:

Existing industrial enterprises need to be studied to assess their effective performance. Such studies need to concentrate on technology, capital and labour utilization, capacity utilization, cost structures and competition. In such studies, attention should be given to the areas listed below:

(a) The manufacturing and repair of farm implements.

(b) The economics of rural feed industry (with possibilities for increased use of agricultural wastes and recycling of other materials) needs to be studied. Poultry, beef and dairy industries are highly dependent on the feed industry. Studies on alternatives to imported chemical fertilizers are also desirable.

(c) Industries which can process agricultural products with a view to increasing the quality and value of the commodities need to be promoted. Constraints and opportunities should be identified first. The assessment of socio-economic viability of rural processing facilities requires studies on raw materials availability, market potentials, technology, financing and management. Processing potentials
exist in cases of commodities like milk, fish, fruits, honey, dairy and horticultural crops.

(d) Small-scale industries that manufacture and repair goods commonly used in the rural areas have always been encouraged. For increased industrialization, the possible constraints and potentials should be studied. Effectiveness of extension services, loan programmes and other industrial programmes needs to be evaluated.

(e) Industrialization is generally not without diverse externalities especially on the environment and society. These externalities must be well understood prior to programme implementation.

(iv) Rural Informal Sector:

This is an area that has recently attracted research, with studies mainly concentrating on issues of urban informal sector employment and incomes. More information should be generated especially on the following topics:

(a) origin, composition and structure of employment.
(b) performance in terms of output, productivity, competition, produce and service quality.
(c) labour characteristics, absorption rates, wage structure and earnings.

(d) the linkages between rural informal sector with other sectors like agriculture, urban formal and informal sectors.

(e) the informal sector expansion; its constraints, limits and the costs and benefits of such an expansion.

(f) income accounting and monetarization of the rural informal sector.

GROUP VI: ECONOMIC POLICIES

29. Economic policies cover a wide area and virtually all the other areas of rural research. This makes it difficult to prioritize the main areas that can be looked into within a short time, given the many inhibitors that restrain research efforts. However, when suitable criteria are used on what the policy is aimed at achieving, then a guideline on priority areas could be given.

30. The group felt that the criteria that can be used to prioritize economic policy research areas are those which will lead to:
efficient use of resources.
- equity in income distribution and employment.
- food security and self-sufficiency in foodstuffs.
- improvement of the welfare of the rural people.
- reducing the country's foreign indebtedness.

Using these criteria, three main priority areas of research were identified.

(i) Pricing and Marketing Policies:

These policies have a major impact on the rural people. They cover many farm products and farm inputs. The existing policies should be researched in order to determine their impact on the already mentioned attributes of rural development. The emphasis should be on:

(a) staple food crops -- maize, wheat and rice. In this case, on-farm storage should be part of the policies to be looked into.

(b) livestock products -- beef and milk.

(c) cash crops, mainly tea, coffee, sugar-cane and horticultural crops.
(d) Farm inputs -- mainly fertilizers, seeds, chemicals, machinery and equipment. Research here should also consider standardization of both domestic and imported inputs.

(ii) Export - Import Policies:

(a) import substitution -- investigate policies that will encourage import substitution; for example oil seed crops.

(b) external aid -- look at food aid and farm inputs and aid for rural products.

(c) devaluation of the currency -- examine its impact on export earnings to the producers.

(d) the impact of policies aimed at intensifying cash crop production (such as coffee and tea) on food production.

(e) examine the form (raw or processed) of exports of major commodities, e.g. coffee, hides and skins.
(iii) **Structural Policies:**

The major areas that need to be looked into are:

(a) **Land Policy:** The issues involved here relate to land tenure, i.e. ownership, control and use of land. Policies should aim at encouraging economic farm units and efficient use of land in the rural areas.

(b) **Rural Credit Policy:** The policy issues that need to be looked into are:
- interest rates;
- eligibility criteria;
- repayment procedures;
- promotion of the informal lending sources;
- crop/livestock insurance.

(c) **Rural Investment Policies:**

- Government budget rationalization: Ways and means of allocation between sectors, within sectors and according to geographical areas should be investigated to ensure efficient and equitable distribution.
- Between sectors, the investigations should determine whether the policies are desirable and appropriate in encouraging rural development.

- Within sectors, and specifically in the agricultural sector, investigations should emphasize the impact of investment on applied research and extension or dissemination of information on the rural people.

- Impact of investment on small scale irrigation and large scale irrigation on rural development.

- Impact of investments on "indigenous" technology as opposed to "modern" technology.

- Geographically, the investigation should be to determine whether policies ensure equity in the rural development of the whole country.

- The policies of private investments should be investigated to determine whether they provide incentives to the investors. The main issues should be on: infrastructural support, capital markets, role of government in production and marketing activities and in rural development projects.
(d) The Rural Labour Wage Rates: The effect of legislated labour wages on rural employment should be investigated vis-a-vis supply/demand relationships and rural urban migration as well as productivity of labour.

COMMENTS ON PRESENTATIONS BY THE WORKING GROUPS

31. After the rapporteurs of individual Working Groups had made their presentations, the Chairman of the Session invited Dr. M. Yambo to start off the discussions and concluding remarks. There were several commendations from participants for the sterling work done by the group rapporteurs in summarizing views expressed in Working Groups. After accepting several comments from the floor, the Chairman invited Dr. Mbogoh (overall Seminar Rapporteur) to give an overview of the seminar deliberations and recommendations.

Dr. Kabiru Kinyanjui, the Director of the Insitute for Development Studies, University of Nairobi, gave the seminar's closing remarks which are reproduced in the next few pages.
Ladies and Gentlemen,

I am extremely privileged and honored to be requested to make closing remarks at this seminar. Listening to the research priorities articulated by the various working groups, I can say that I am satisfied from two perspectives. As a social science researcher I feel we have identified very important research topics which if undertaken would increase our knowledge on the rural economy and thereby contribute to policy direction in this field. Secondly, as a part-time small-scale farmer, I feel you identified crucial issues in the small-holder sector which if dealt with can go a long way to increase productivity, income and welfare of the rural population.

Allow me, Mr. Chairman, to make a few observations on the background of the Rural Social Science Programme which sponsored this workshop. This programme was initiated on the observation that Kenya's economy for
years to come was to remain predominantly rural-based and a large proportion of its population was going to continue to derive its livelihood from the rural sector. Consequently the social scientists will be required to continue to describe, analyse and interpret the emerging reality with a view to guiding and enhancing policies and developments which take place in this sector. In addition they will be required to participate in the implementation and evaluation of the rural sector policies.

To undertake these emerging and challenging tasks in the rural economy and guide the emergence of informed and appropriate policies, the Rural Social Science Programme under the auspices of the Departments of Agricultural Economics, Economics, Sociology and the Institute for Development Studies, University of Nairobi, was expected to focus on three main fields:

(a) to strengthen and sustain the development of high quality and relevant research in rural areas. This workshop has identified some of the priority research which the researchers and research institutions should undertake. I believe some of these research topics will be carried out by researchers present here in the coming five years. But given the heavy teaching load our academic staff are undertaking, we should not expect much to be done, despite the prevailing good will among us.
(b) secondly, to promote the training of rural-oriented social scientists and thereby increase the numbers of researchers as well as upgrading those already working in this field. This was to be done through support of graduate programmes for Masters and Ph.Ds. in the departments of Sociology, Agricultural Economics and Economics. The programme was also to encourage the revitalisation and updating of the curriculum of graduate studies. Writing and revision of teaching materials and monographs was envisaged. In addition, the programme was intended to provide doctoral students with opportunities for exposure to field work and on-going research in Kenya and elsewhere.

The programme was also intended to provide incentives and facilities to social scientists to enable them to increase their output of materials that would enrich knowledge of rural Kenya. Researchers were expected to establish mechanisms of networking with others working in this field - policy makers and academic staff of the other public universities and research institutions. Networking between Kenyans and other (working in similar fields) in the region was to be promoted.
(c) thirdly, the programme was to strengthen our capabilities in dissemination of outputs of research through local publications, monographs and through policy seminars and international conferences. In this way, graduate students would publish their dissertations or portions of them, while other researchers would public monographs for dissemination to various audiences. The experience of IDS in publishing its research materials is an important experience and contribution which can be emulated elsewhere.

In short, this programme was intended to strengthen the participating Departments and IDS in training of an increasing number of rural social scientists to undertake quality and relevant research on rural economy and in disseminating findings of the research undertaken in this country. In this way, social science can make a substantial contribution to understanding, functioning and productivity of the rural economy.

Looking at what has been said and accomplished here in the last two days, I am convinced more than ever, of the need for this programme. The challenge then becomes how to revitalise the programme and work out strategies to acquire adequate funds and resources for fulfilling the declared goals and objectives.
In reference to the future development of the Rural Social Sciences Programme, I am reminded of an advertisement running on Kenyan television. The advertisement depicts a man and a fashionable lady having dinner in a high class hotel. The atmosphere of the occasion looks unmistakably romantic. It then reaches a stage when the man puts a suggestive question of where they were to go from there. But before the lady could answer the question, a waiter accidentally messes up her beautiful dress with the food he was serving. The answer from the obviously annoyed and furious lady is one the man never expected or wanted. She answers that from there, they were going to a particular dry cleaner. This was the message of the advertisement!

From here, where do we go? The organising committee has to answer this question - not by shelving the programme, but by revitalising this programme to serve the declared objectives. The organising committee has to take, as of now, an activitist approach to promote the programme within the university community and among the donor agencies. I am convinced the participants of this workshop will give the organising committee the support it requires to undertake the challenge.
In my view this seminar has broken new grounds in pointing out new areas for social science research. In the past and especially in the years immediately after independence, research and policy focused on issues related to increasing production particularly among small-holders. Rural development researchers and particularly those undertaken at IDS were mainly concerned with how production could be accelerated through extension services, adoption of improved seeds and better farming methods. The other broad topics which concerned the researchers were the distribution of agricultural services and inputs, and the marketing of farm commodities. Distribution of inputs such as credit and fertilizers to reach the small-producers were a concern of research as well as the efficiency and management of producer co-operatives and marketing boards.

Research on the nature and operation of rural economy has reached a stage when the issues of social differentiation should be addressed. This seminar has indicated a strong orientation to this direction. Who benefits from the increased total production or increased distribution of inputs and increased marketing capability of co-operatives and marketing boards is now an important issue. Research needs to increasingly address itself to the questions of rural differentiation, and especially
as it affects groups such as women, landless and unemployed youth. With increasing population growth, segmentation of land and lack of opportunities in the urban areas, coupled with differential access to credit, inputs, marketing outlets, technology and information, rural differentiation is going to become an important research area. The seminar has rightly pointed this out and stressed the need for more policy-oriented research.

Let me briefly list some other research topics which I think will need our special attention in the coming five years.

(1) Arid and Semi-Arid Areas Development: This is a very critical area to the Kenyan economy if at all we want to increase our land frontiers and utilize this large ecological zone of the country.

(2) Implication of oil discoveries to Agriculture: With the possibility of discovery of oil in Kenya, serious thought needs to be given to the implications of this to continued agricultural development. The experiences of Nigeria in this field will be useful to us.
(3) The impact of new technologies, for instance biotechnology, on agriculture: biotechnology has enormous potential for food production and livestock development for small-scale producers. Researchers need to monitor the development of the technologies and see what implications they have on Kenyan agriculture - especially small-scale producers.

(4) Utilization of regional comparative advantage for development of rural economy. This is needed for assessment of the sectors of agriculture and rural industries which can improve through utilization of regional opportunities and co-operation.

(5) Implications of debt burden on agricultural development: How does debt servicing affect allocation of resources of agriculture, health and other services which are needed for a dynamic and productive rural economy? Research is definitely needed in this area.

(6) The need for theoretical debate on rural economy: tied with the emergence of this debate, should be placed a utilization of indigenous knowledge and technologies.
(7) Need for Research co-ordination with natural science research. While there is need for co-ordination and interaction between social scientists, there is an emerging need for interface between social and natural scientists. I am glad KARI was represented in this workshop. We need an interaction with other research institutions such as KEFRI and KEMFRI which work on areas which touch on rural economy.

Finally, Mr. Chairman, I would like to express our thanks to a number of people who have made this seminar a success.

Our sincere thanks go to Professor G.M. Maloiy the Principal of College of Agriculture and Veterinary Sciences who officiated at the opening of this seminar and inspired the high standards which the seminar participants have all along been challenged to live up to. Let me say we do appreciate when University authorities interact with researchers and listen to what they have to say.

Secondly, our thanks go to those participants who prepared background papers for the seminar. They provided valuable insights which have guided the deliberations of the seminar. We are therefore
grateful to Dr. Patrick O. Alila, IDS; Mr. J.N. Kamunge, Ministry of Agriculture; Dr. O.L.E. Mbatia, Department of Agricultural Economics, Dr. E.K. Mburugu, Chairman Department of Sociology and Dr. Krishna K. Mukherjee, Department of Economics, University of Nairobi.

I would like also to thank all Chairmen and rapporteurs of the various working groups and sessions. You have done a wonderful job within a short time. Special thanks go to Dr. Mbogoh who has kindly agreed to be the overall rapporteur of the seminar. He has done a good job as evidenced by his comprehensive interim report and we shall be expecting a good 'dry-cleaned' report soon!

Let me record sincere appreciation to our two colleagues from the Egerton University. We hope their participation will continue. In addition, we hope to see more participation of others working in this field especially those from the other public universities.

The Ford Foundation merits special thanks for the way they have supported this programme from its inception. They not only have provided funds for the programme, but have also given us valuable advice and encouragement.
We wish to thank Dr. Diana E. Rocheleau, a Programme Officer of the Ford Foundation who has been a participant of this seminar. We appreciate the collegial spirit which she has maintained in her work which was so evident during this seminar.

Finally, Mr. Chairman, allow me to express our most sincere thanks to Dr. C. Ackello-Ogutu, the Chairman of the Department of Agricultural Economics, University of Nairobi and the Chairman of the Organising Committee of the Rural Social Science Programme. Dr. Ackello-Ogutu has done a sterling job in organising this seminar and essentially enabling us to map out new directions of the programme. Dr. Ackello-Ogutu, you have worked tirelessly for the success of this seminar and in return we offer our thanks. In accepting our thanks, please note the hidden agenda: You have so far done a good job, but we expect you to take us to the next stage of the development of this programme!

All of you have worked very hard in the last two days, and, in the last few months, marking exam scripts. So, I wish you a restful May Day!. You deserve it!.

With these remarks, I declare the seminar officially closed.

THANK YOU.
ANNEX 1: "Changing Rural Development Perceptions and Social Science Research Contributions"

By

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Introduction: The Emergence of Rural Development Concerns

It is just over a decade since rural development emerged near the top of the development policy agenda in the African context. However, in that relatively short time span, rural development has become the major pressing concern in the development programmes of various African states. This concern assumed dramatic proportions in the 1980s, supposedly due to the seemingly endless crises of stagnation, poverty and famine in Africa. The resulting consequence is that rural development has become of crucial importance for virtually every development effort in the region.

African development crises are traced to the reliance on development models based on industrialisation and urbanisation strategies that embraced uncritical outward-looking policies. The outcome of policies and programmes of such strategies has been a clearly apparent failure to provide dynamic forces for the structural transformation of the African economies especially in the rural sector. This somewhat unexpected turn of events has inevitably led to the current pre-occupations with rural development and research priorities on the part of development assistance agencies, national political leaders, development practitioners in government and non-governmental organisations as well as academics.
Rural Development Perceptions and Strategies

The historical experience with designing, implementing and evaluating rural development programmes shows certain distinct changing perceptions of the rural development process. This can be attributed first to the revisions of models of development particularly evidenced by the shift from macro to micro levels of analysis. A case in point is the change of focus from agriculture and industry in dual sector macro economic models using per capita income index to farm level using the household unit standard of living index. Secondly, arising from the changing conceptualisations of the development process, there has been an improved understanding of the nature of the rural society, especially its socio-economic structure, which has in turn resulted in new perceptions of rural development. The key point in this regard is the recognition of noneconomic factors as playing a major role in the development process.

Community development (CD) which was transferred to a number of African countries in the 1950s by the British colonisers, but did not receive the same prominence as it had received in Asia, was the initial major perception of development in the rural areas.
Proponents of CD viewed it as a peaceful means for people to be mobilised to help themselves to realise felt needs of the economic, social and political spheres of their development.

It can be said that the major source of shortcomings of CD was that in its hey day, the "trickle down" theory of economic development was in vogue. The CD programmes were thus not intended to, nor did they affect the basic structural barriers to equity and growth in the rural communities. The programmes accepted the existing local power structure as given.

Community development village-level workers usually aligned themselves with the traditional elites, thereby strengthening the economic and social position of these elites. There was little attention given to assure that benefits from community development programmes accrued to the rural poor who, on realising this did not therefore, for the most part, respond to this approach.

The argument, in brief, is that the approach was rendered ineffective politically because of basic conflicts that were too deep to be solved simply by the persuasive efforts of community development workers.
The expected reconciliation and common participation for the sake of development occurred as an exception rather than as a rule. The shortcomings of the approach economically, had to do with the fact that both aspects of rural poverty, i.e. low production and unfair distribution, were not changed to an appreciable extent by the community development programmes.

Integrated Rural Development (IRD) was the second major perception of development in the rural areas and was very much in vogue in the 1970s. It was embraced mainly due to the acknowledged failure of the Green Revolution to have much impact in Latin America, the Caribbean, and Africa.

The projects initiated under IRD were based on the assumption that a critical minimum effort was necessary to have a noticeable impact on target populations in a short time. The projects were therefore concentrated in a limited area and were

administered through semi autonomous agencies which paralleled other government agencies. The focus of IRD projects was on small farmers and an attempt to promote improvements in the quality of rural life and increase off-farm opportunities.

Review analysis of IRD projects have revealed certain basic shortcomings of interest here. First, the projects were based on inadequate knowledge of technical possibilities and small farm conditions. They exhibited little understanding of the local institutional environment. The second shortcoming, arising from the foregoing first one, was that the administrators of these projects tended to regard rural communities as undifferentiated masses and therefore frequently ignored social structures and economic and political hierarchies. This, it will be recalled, was the key shortcoming of the CD approach. Thirdly the increased scope of rural development activities exceeded the design, implementation, and evaluation capacities of national governments and donor agencies.


ibid.
The more current perceptions of rural development can be subsumed under one broad concept namely, local level development (LLD). The concept can be taken to mean broad-based socio-economic development, induced and managed locally.

The key feature of LLD strategy is that its focus is on the local population and its potential. The emphasis in the strategy is on mobilising and improving local capacity, in particular experience and local knowledge, entrepreneurship and human capital. These should enable local communities to mobilise local resources more efficiently, overcome locational, structural or physical (including resource) disadvantages. Furthermore, government and other private effort can be made more effective and relevant to local needs. Thus a greater control can be exercised over local resources and development.

A crucial requirement in local level development would therefore be strong local level development organisations comprising government and non-government (NGOs) organisations, community organisations, co-operatives, etc. The essential roles of these various organisations would include, for instance, acting as catalysts for local development initiatives and projects,
disseminators of new ideas and innovations, providers of critical information and most importantly, playing the role of intermediaries between the people and government. In other words, development at the local community level requires the presence of strong local institutions.

It has become apparent that the current major shift to rural development in the African context is in effect a recognition of the imperatives of LLD. There are in fact clear indications that the highest priority being accorded to rural development does not arise from the mere fact that in most African countries the rural regions have suffered decay and decline in the past. Rather, it is a response to the imperatives of LLD for overall national development in the African situation.

First, it is a fact that Africa is likely to continue to remain more agricultural and rural than any other continent for some time to come. A glaring evidence of this is that seventy-five per cent of the African population is still locked in the rural areas. Moreover, agriculture is the most important source of employment and income for a disproportionately large majority. At the same time, prospects of urban industrial sectors presiding dynamic growth forces appear gloomy in the near future.
Secondly, and even more important, is the fact that a further decay and decline of the rural economies and the concomitant drift of rural populations to cities lacking productive work and income opportunities can threaten the very basis of some, if not all, of these societies. This makes apparent the need for LLD which can provide the basis for a major departure from the hitherto prevalent urban-biased, bureaucratic and highly centralised systems of rural development.

Priority Areas for Research

An endeavour to list, single-handedly, research priorities for a broad field of research like rural development which involves practically all the disciplines in both the natural and social sciences would seem problematic and may be a futile exercise. There is first the obvious bias of an individual researcher relying too heavily on his/her background discipline(s) thus making the resulting approaches objectionable by other researchers. Secondly, on-going socio-economic changes in the rural areas make rural societies dynamic. The implication is that

research priorities, out of necessity, keep changing and their discussions must be within the context of a clearly defined time frame.

Thirdly, research priorities should at best serve only as pointers to the current research problems. The idea here is that the choice of research topics should remain the preserve of individual researchers, allowing for definition and analysis of problems based on one's expertise and experience.

In the light of the foregoing caveats and reservations, what follows can be more appropriately referred to as priority areas for research on rural development in the Kenyan context*. Once again, one cannot draw a clear cut line between the areas for the same reason of the nature of the dynamics of social and economic change within rural societies advanced earlier in relation to rural development issues. As a matter of fact, it is these issues that bring about so much overlap between the research areas. The research areas can be categorised as follows:

1. Food Production and Availability.

Food has since the 1970s become a priority concern to a number of African governments resulting in the initiation of programmes for accelerated food production. The common objective has been to reverse the long decline in food production per capita and to reduce dependence on food imports.

Studies on food production are therefore most appropriate. The emphasis of such studies should be on the various constraints on food production. Special attention should be accorded to the marginal areas otherwise referred to as semi-arid and arid areas.

The more specific subjects of study calling for priority consideration include post-harvest losses of food crops; storage systems; food distribution systems at both macro and micro-level; food consumption patterns; food entitlement in relation to alleviation of poverty; and implications of food aid generally, and Food-for-Work programme in particular, in regard to consumption patterns and farmer incentives for own production.
2. Cash Crop Production

The purpose and extent of cash crop production in externally-oriented fragile African economies continues to dominate discussions of overall development in the African context. There is, however, a need for this concern to focus more on the implications of cash crop production for development in the rural areas.

A broad area of study to which research effort should be directed is the nature of the limits being imposed on food production by cash cropping and how this relates to rural development. Also, cash cropping in particular has resulted in links between agriculture and the international commodity markets. These links and their implications for rural development call for analysis.

At the district and regional levels, there are imbalances in the production of cash crops influencing development within a district or region that need to be studied and their implications understood. A specific point which should be of interest is the fact that in some cases there is legislation restricting planting, cropped area, uprooting, intercropping and spacing of cash crops.
3. Livestock Production

There is need for research on production of livestock. The various technologies that are already in use and those that can be devised for purposes of improved livestock production should be subjects of investigation. These studies should bear in mind the different livestock farming systems in a country like Kenya.

The management of fisheries constitutes an area of study in its own right to which more attention should be directed. There is growing interest in fish farming which should therefore be studied so as to be better understood.

4. Farm Inputs: Availability and Use

There are certain major questions regarding the availability and use of farm inputs that serve as useful indicators of priority areas for research. There is first the question of suitability of inputs for both the soil itself and the wider ecosystem. Furthermore, inputs have varying health implications for farm workers as well as affecting distribution of labour between the sexes in different ways that require proper analysis.
Secondly, there is the question of existing or possible alternatives to chemical fertilizers. Traditional farm inputs, intercropping systems, minimum tillage systems, etc. need to be studied to establish their real potential as alternatives to chemical fertilizers.

Thirdly, there is need to examine the mechanisms for making agricultural inputs available with a view to improving existing trends and practices. The basic questions relate to institutional framework, costs of inputs, timeliness of availability and credit arrangements. In particular, the role of private enterprise in input distribution is a relevant consideration.

5. Commercialisation of Agriculture

It is important to understand the process of commercialisation of agriculture and the impact on society. The appropriate concerns include the nature and use of major agricultural equipment, the types and mix of food crops grown, farming practices, etc.
6. Agricultural Pricing and Marketing

Following the recognition of economic motivation of farmers, there is need for detailed analysis and a proper understanding of farmer responses to various pricing systems and in particular to the parallel (black) markets. This is of critical importance to agricultural production policies.

A specific problem area calling for attention is the control of movement of grain. The relevant considerations include regional food-sufficiency, equity, access to markets and effectiveness of existing marketing organisations.

7. Agricultural Extension and Training Needs

To cope with the rapid changes in agriculture, research to help design and modify agricultural extension and training programmes is bound to remain a continuing concern. Specific research should be done on extension methods, translation of research findings to farm situations and the perennial problems of finance and implementation of extension programmes.
8. Land Tenure and Use

The basic question is access to and use of land which is the rural population's key resource in rural development. There is therefore a need to examine land registration and tenure arrangements with a view to showing the impact of land sub-divisions, the effects of legislation on various types of land use, trends in land sales and implications for a land market, and the social and environmental consequences of uses of land, especially the nature and extent of landlessness.

9. Irrigation

The interest in irrigation was sparked off by the onslaught of devastating droughts that have of late swept the African continent. The role of irrigation systems in rural economies, especially smallholder schemes, should be thoroughly studied.

A useful starting point is a historical research into traditional irrigation systems embracing comparative analysis of appropriate irrigation technologies. Studies should also be directed to alternatives to irrigation e.g. valley-bottom development, tube-wells, water harvesting and land reclamation, which should also be subjected to comparative analysis.
It is important, particularly in regard to large scale irrigation systems, to carry out indepth studies of settlement policy; costs of irrigation, both human and financial; crop mix; energy utilisation; and management.

10. Rural Employment

In this connection, studies should be undertaken to provide an accurate understanding of farm and off-farm employment. There is still need to study rural-urban linkages, intra-rural migration and settlement patterns.

The informal employment sector which the Kenya government is now taking an active interest in requires further research. The basic question regarding its nature and prospects need to be addressed immediately if the informal sector is to play an appropriate role in rural development.

11. Population, Settlement and Distribution

There is need to study population-related programmes such as the on-going family planning programmes to ascertain the interrelationships between rate of population growth and the provision of basic needs such as food, health, education, employment, etc.
The population growth and migration trends raise problems of housing and settlement. There is need for studies focusing on issues of availability and suitability of housing. The patterns of settlement in relation to basic services including schools, health facilities, water and transport, should also be researched.

Health care and nutrition constitute an important priority area of research if development is to bring about a healthy rural population.

12. Women in Rural Development

The role of women in development generally is currently a matter of priority research concern. In regard specifically to rural development, there should be more indepth studies of households looking at the decision-making process, time allocations for various activities, the implication of technological change and the overall dynamics of the changing role of women in rural environments.

There is need for investigations to focus on status of women and fertility, single parents and unplanned parenthood, particularly among adolescents.
13. Institution Building

The organisational arrangements for rural development should be researched focusing on improving effectiveness of existing institutions and initiatives to build new institutions. The interlinkages between various institutions at the local level comprising, among others, government departments, parastatals, NGOs, community organisations and co-operatives, also need to be studied in order to be properly understood. In connection with interlinkages between institutions, a study of District Focus for Rural Development in the Kenyan context is becoming increasingly long overdue.

The NGOs which are having an increasingly prominent role in rural development need to be studied carefully. Research should focus on their contributions in various fields of development including education, agricultural production, primary health care, family planning small-scale enterprises and community mobilisation. The key concern is the extent to which these organisations help in improving the capabilities particularly of the poor and marginalised rural population.
14. Technology Development

Technology development is an issue that runs through virtually all the priority areas for research listed above. This can also be said of differentiation, equity and participation. Technology development is, however, listed separately to underline the pressing need for studies to unearth indigenous technical knowledge on areas such as agriculture, health, nutrition and education. Such knowledge has proved useful in realising the goals of many rural development programmes.

Social Science Research Contributions

The development process in the African context is fraught with difficulties that are pressing especially on the rural population and for which intellectuals should provide some understanding as implied in the following quotation:

As Africans in villages and towns take what steps they can to find their way through hard time, intellectuals can try to clarify why and how times are hard.\(^\text{+}\)

There can be a debate as to the exact role of intellectuals, whether, for instance, they should

not go beyond just providing an understanding. What seems clear is that collaborative effort by intellectuals as a group is an imperative. However, collaboration among intellectuals in the African context, especially between the natural and social scientists, has really not taken root. That this is the prevailing state of affairs is underscored by the concern being expressed already regarding the non-existence of an intellectual community in Africa, even just within the social sciences alone.

The source of problems of collaboration among scientists in the case of rural development endeavours can be said to have been erroneous thinking in earlier studies of development process that one discipline or even a sub-discipline could provide all the answers to all the questions of development. A case in point is the discipline of development economics, as the following quotation representing a view from within clearly shows.

Development economics started out as the spearhead of an effort that was to bring all-round emancipation from backwardness ... By now it has become quite clear that this cannot be done by economics alone ... our sub-discipline had achieved its considerable luster and excitement through the

+ A. Mafeje, "Development of the African Social Science Community" op. cit.
implicit idea that it could slay the dragon of backwardness virtually by itself or, at least that its contribution to this task was central. We now know that this is not so.

A major consequence of the above trend of thinking was the non-economic variables were ignored in rural development programmes as indeed we found to be the case with community development and integrated rural development. In initiating agricultural credit, for instance, only financial factors, but not non-financial levers of development such as social norms and obligations, were considered although the later could have been the most crucial for the success or failure of the credit programmes.

Following the acceptance that the various social science disciplines have a contribution to make in rural research, the question that arises is the nature of such contribution. It is necessary, for instance, that appropriate theoretical perspectives are adopted which, apart from making possible collaboration between various scientists, also yield findings that inform development practice.

The experience with neo-classical theories of growth in economics, diffusionist functionalism in sociology and political science and tribalistic structural-functionalism in anthropology revealed first, that an artificial division between disciplines can arise from a theoretical perspective adopted for research on development. Secondly, theoretical perspectives adopted can result in research serving neo-colonial interests, for instance, and not genuine rural development.

It can be said that it is with the adoption of political economy perspective that these shortcomings came to light. Furthermore, it has been pointed out that far from being confined to particular disciplines, political economy has become more general in the social sciences in Africa+. The more basic point being made is that theoretical advancements are a must if social sciences research is to make useful contributions to rural development efforts.

The well known claims by social scientists is that the results of social research contribute to policy making which indeed is true in some instances. The position being supported here, however, is that these

+ "Development of the African Social Science Community" op. cit. p. 16.
contributions to policy should be backed with the design of operational strategies to translate the policies into real life*. A case in point is the prescription of participation in rural development programmes which has been clouded in so much rhetoric that it is now more of a myth than reality. The pressing needs seem now to be the design of social techniques to achieve participation in different social contexts.

The message being put across is that social scientists should not only analyse and explain rural situations but should also venture more into transformation of the status quo. A useful reminder in this connection is that "high yielding social organisations are not less important for development than high-yielding crop varieties, and intensified agriculture cannot occur without intensified human organisation**.

Thus it can be said in conclusion that ex-post evaluations or social impact assessments which have taken up a good part of analysis of rural development

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** Ibid.
by social scientists are in themselves far from adequate. Rather, social science research contributions should run the full course of a project's cycle, covering the various stages viz., identification, preparation, appraisal, implementation and evaluation.
ANNEX 2: "Rural Research Priorities in Kenya: A Sociological Perspective

By

Dr. E.K. Mburugu
Department of Sociology
University of Nairobi
Introduction

The attention given to matters related to Kenya's rural development should be seen as an attempt to uplift the living standards of about 80 - 90% of the population. However, the concept of rural development is seen in different ways depending on one's perception of what development means. For some people, rural development primarily means increased food production to meet consumption needs of households, while for others, development means marketed food surplus. To others, rural development is seen in terms of marketed agricultural product (whether food or non-food) that earns foreign exchange. To others still, rural development means not only increased production and increased income accruing through sale of agricultural produce, but also the ability of the social and political system to limit excessive income inequalities between households, communities and regions. And further still, rural development may be seen in terms of infrastructural developments such as road developments, distribution of health centres, schools, markets and water availability.

While all these perspectives on rural development are important to conduct research on, it is our view that rural development should be seen in terms of agricultural development that satisfies both food consumption needs
and market needs in a manner that promotes higher standards of living through increased income from sale of agricultural produce. Agricultural development should also be assessed in terms of the unexpected negative impacts it may create for individuals and groups of people. Such negative impacts should be detected early enough to be rectified through appropriate policy actions in the process of rural (or agricultural) development.

Given the above considerations, it is possible to identify at least four dimensions along which rural development can proceed. These dimensions of rural development must be considered as having strong agricultural base. They are (a) the relationship between agriculture and population, (b) the mode of utilization of agricultural income as it increases, (c) the alternative time-use as labour-time in agriculture is reduced due to increase in labour force or mechanization, and (d) social issues and problems arising from agricultural changes. These dimensions of rural development need not necessarily be ranked in the same order given above. Let us briefly discuss each of these dimensions.
Relationship Between Agriculture and Population

Kenya is essentially an agricultural country. Therefore, much of the substantial rural population must depend on agricultural production to sustain viable family life as well as to improve the standard of living among family members. In this sense, the balance between agricultural resources and the size of population is a delicate relationship that requires careful management of farm production and labour activities. The nature of this relationship will of course depend on the agro-ecological potential of an area. However, it is already evident that the areas of greatest population pressure in Kenya are also areas of greater agro-ecological potential. The ability to feed large and rapidly increasing populations as well as to raise surplus for the market in these areas is increasingly becoming questionable.

With rapid increases in population and consequent decline in the size of farm holdings, women and children have become more visible in agricultural labour. The thrust in agricultural research has, however, tended to ignore the contribution by women and children. This problem is aggravated by the fact that official statistics hardly disaggregate labour by age and sex. Moreover,
the variety of agricultural tasks in which men, women and children are involved are rarely shown. Studies that bring out such details as well as showing the cultural variations in gender and age allocations of tasks are therefore long overdue.

Utilization of Agricultural Income

The research focus here should be on sources of agricultural income and how this income is utilized. It would be interesting to find out the proportions of agricultural income accruing to various categories of labour (e.g. women, men and children). It is generally conceded that agricultural development in some respects has meant progressive deterioration in the living standards of women. However, research on this issue has not been carefully carried out. It would also be important to find out whether the amounts of men's income that are expended in supporting the family declines as women's income from agriculture increases. The specific ways in which agricultural income is used in the households should be understood in order to determine whether agricultural income is used in ways that improve farm productivity.
Alternative Time-use as Labour-time in Agriculture is Reduced

It is evident that the level of farm labour mechanization is increasing in Kenya. At the same time, the average size of households is also increasing, thus increasing the level of shared labour. Consequently, the number of hours spent on agricultural labour are progressively bound to decrease. Research should be conducted to find out how various age groups and gender use the surplus time. The questions that need answering are whether or not there is a significant increase in non-farm activities as agricultural labour time declines.

Social Issues and Problems Arising from Changes in Agriculture

In certain aspects of family and community life, the nature of agricultural development may not always be associated with positive gains. Some of the benefits that are lost due to the nature of agricultural development may affect the entire population in the community or some categories of that population. A few examples can be given:
(a) Nutritional status may decline due to emphasis in growing non-food cash crops such as cotton, tea and coffee at the expense of growing food crops such as beans, potatoes, maize, vegetables as well as keeping dairy cattle.

(b) The level of alcoholism and domestic conflicts and abuses might increase when household heads realise larger disposable cash incomes.

(c) The position of women decline if they have no control over or access to increased agricultural income. This is likely to be the case if agricultural production favours non-food cash crops such as coffee whose income is often controlled by men. Land on which women grow food may be taken over by cash crops whose sale and income are entirely controlled by the men.

(d) Increased food production may result in improved nutritional status, and fertility may rise when use of family planning is ruled out both culturally and psychologically.
In conclusion, it can be stated that much still remains to be done to improve agricultural incomes of Kenya's rapidly increasing population. We have to bear in mind, however, that success in rural development inherently entails sociological changes that may in themselves be inimical to further development and welfare improvements. Research must be conducted on these various perspectives in order to facilitate appropriate policies and rural development projects.
ANNEX 3: "Rural Research Priorities in Kenya: A Development Planning Perspective"

By

J.N. Kamunge and W.M. Shihemi
Development Planning Division
Ministry of Agriculture, Nairobi
In our view, food and health should be among the top priorities for any discussion relating to Kenya's rural development. Research programmes must therefore be directed to these two aspects. Related issues that may constitute viable research agenda are: land reform, pricing policies, and causes of rural project failures. These issues are briefly discussed below:

(1) Land Reform Policies

In general, land reform leads to changes in resource allocation between and within sectors. For example, conversion of forest land to agricultural land implies a shift of resources from forestry to farming. The marginal contribution of resources (land and labour) in farming and forestry are different and hence has a potential effect on the country's income, employment, and other development variables. Such effects should be evaluated through research.

Most of the large scale farms have been and continue to be sub-divided into smaller parcels of less than 5 ha. Land sub-division brings quite a number of changes such as enterprise mix (e.g. shifts from wheat and beef cattle to small scale maize and potato production), capital-labour ratios (e.g. less capital on smaller farms) and soil conservation practices.
Sub-division of land may be motivated by non-economic factors but the social scientists must endeavour to provide to the policy makers the possible alternatives as well as the costs and benefits of policies already implemented. It is in this regard that we urge for frequent dialogue and exchange of ideas between social scientists and development planners in the relevant ministries. We recommend that research on land reform policies be done specifically to determine their effects on:
- total output (GNP)
- employment generation
- equity
- food self-sufficiency
- foreign exchange generation

(2) Agricultural Pricing Policies

The reasons for inadequate agricultural production are many and varied, ranging from poor production techniques to political intervention at various levels. In the name of improving income distribution and the adequacy of food intake, many governments try to keep food prices low, wage rates high, interest rates on credit low, and imports expensive through undervalued foreign exchange rates. All these distortions do have important implications for the real income of virtually everyone in a society,
and they also are absolutely critical as signals for the efficient allocation of resources. In the Kenyan economy, there are a number of agricultural inputs whose prices are subsidized e.g. irrigation water and credit. Also, some consumer prices are subsidized.

Bale and Lutz (1981)¹ argue that the agricultural sector in the developing countries is being taxed through price intervention measures, hence agricultural output in the developing countries are often significantly smaller than it would be in absence of distortions. With consumption, the picture is reversed. The developing countries therefore consume more than they would without price intervention measures.

Through price interventions, the wrong price signals are given to farmers. This leads to distortion on the intensity of use of inputs from their economically optimal level and significant wastes result. The short run distortions significantly impede efficient long run growth strategies.

There is need for empirical analysis of the pricing policies in the Kenyan economy. The size and direction of the general or average price distortions in the agricultural sector and the economy as a whole should be evaluated. The effects of price distortions on income growth, adoption of technology, employment generation and equity should also be evaluated.

(3) Failures of Rural Development Projects

There are numerous cases of failure of rural development projects sponsored by the governments not only in Kenya but also in Africa in general. There are relatively few specific rural development programmes that have clearly achieved their objectives except at very high costs. Examples of unsuccessful rural projects are the Kenya's Large Scale Irrigation Schemes. All the seven government irrigation schemes except Mwea have annual revenues being in excess of annual expenditures. This indicates that they are not financially feasible. The question is: why have failures in rural development projects persisted?

It is our hope that the seminar will shed more light on the three problem areas mentioned above, and that in the next five years, the social scientists will channel their research efforts appropriately in order to assist planners and policy makers to fight food and health problems in Kenya's rural areas.
ANNEX 4: "Priorities in Rural Research: A Plea for Marketing"

By

Dr. E.K. Mukherjee
Department of Economics
University of Nairobi
Agriculture provides a livelihood for more than fifty per cent, and in some cases eighty per cent of the population in the various countries of Africa. It should, therefore, rightly occupy the first place in the development priorities of most of these countries. Even in those countries which are either hard mineral-dependent (e.g. Guinea, Liberia, Morocco, Togo, Zambia and Zimbabwe) or oil-dependent (e.g. Algeria, Angola, Congo, Gabon, Libya and Nigeria), there is a growing emphasis being laid on the promotion of agriculture, both to accelerate self-sufficiency and to diversify the export structure.

Performance of Agriculture

Unfortunately, the performance of agriculture in Africa in the past decade has been poor, particularly where food production is concerned. The reasons for this dismal performance are numerous and disparate. It is needless to point out that unrealistic pricing and distribution policies have greatly contributed to it. Not only were prices too low to attract both commercial and peasant farmers, but the purchasing and distribution of produce were also cumbersome. Consequently, most of the farmers preferred to switch to much easier
products which did not require large fleets of transport, or to those in which markets were neither too widespread nor saturated. Some farmers flocked to the urban areas in search of wage employment thereby depriving the rural areas of a much needed labour force. For instance, the pricing of agricultural produce at economic levels would have meant the raising of the cost of living of the urban dwellers. But with a sharp rise in the costs of production in the rural areas where farming is the mainstay, farmers, especially commercial farmers, would start agitating for higher prices. The subsidies could be increased by the government only to a limited extent. Thus discouraged by unremunerative prices, farmers would switch to more highly priced commodities like soyabeans and cattle, and away from staples such as maize.

**FAQ and Agriculture in Developing Countries**

According to the Food and Agricultural Organization (FAO) experts, there is a series of causes for the present crisis in agriculture in the countries of Africa. First, there is a distortion of official policies to the detriment of agriculture. This is brought about by a failure to invest enough in the agricultural sector. Although in many of these countries, more than half of Gross Domestic Product (GDP), employment and foreign
exchange earnings are accounted for by agriculture in Africa as a whole, the sector gets less than ten per cent of the national budgets. It is therefore deprived of the financing it needs to develop and the peasant farmers produce very little more than they need to feed their families. There is thus no incentive to produce and the difficulty of finding seeds, fertilizers and other agricultural inputs where there is not enough money prompts potential producers to avoid operations.

Then there is the particularly unfavourable terms of trade in the rural sector, which suffers from the effects of the artificial drop in food import prices owing to the over-valuation of national currencies. In this connection, it will not be out of place to mention the change in eating habits and also the issue of young potential farmers leaving agriculture for the urban (mostly civil) jobs where they feel they earn more and command better respect.

The other factors responsible for the malaise are high demographic growth, a slowing down in the extension of arable land, faster deterioration of the environment, an external economic climate that makes it increasingly difficult for most African countries to balance their
books and, lastly, technological stagnation leading almost everywhere to a ceiling on, or even a decline of, crop yield. The World Bank in its Annual Report of 1988 subscribes to the views of the FAO. The principal measures, according to the FAO, are to provide incentives, to supply inputs and to promote institutions and infra-structure.

Priority Areas in Rural Research

It is evident from what has been discussed above that one of the priority areas in rural research is a study of the rural marketing system. This will seek to find out the factors which inhibit the availability of farm inputs in time and at reasonable prices. For instance, in Kenya there was considerable rise in the prices of chemical fertilizers, bags and seeds. These items were also not available in sufficient quantities in time. Further, the data on price and terms of trade in Kenya indicate that the general index of agricultural output prices has been increasing modestly and at a rate much lower than that of the index of input prices. Consequently, the terms of trade for agriculture in the country have been declining and have remained unfavourable for three years. It is, 


++ ibid. Table 8.8 p. 103

+++ ibid. p. 102
therefore, imperative to ensure the availability of farm inputs at reasonable prices in time since the major factor determining the level of production and yield rates is the availability of these inputs and the extent to which the farmers can afford to use them.

**Improving Performance in Agriculture**

To provide incentives to farmers, it is essential to ensure (i) distribution of inputs, (ii) economic prices and (iii) markets for their produce. This will necessitate adoption of policies on price support, assured purchase of outputs, price stabilization and, market modernization and development. This will in turn involve the creation of marketing facilities like regulated markets with various facilities like auction platforms, enforcement of grades and standards, provision of market information, storage facilities and machinery for settlement of disputes.

**Research and Agricultural Marketing**

In the ultimate analysis, it would be desirable, in the context of the objective of providing incentives to farmers, to undertake research on the following:
(1) the farmer's share of the consumer's expenditure on his produce
(2) the gross marketing margin (farm-retail price spread)
(3) organization of agricultural marketing in the country.

Of course, for a comprehensive analysis of the agricultural marketing system of the country in the context of economic growth, market structure analysis would be valuable. At the same time, for certain reasons (like limited knowledge of marketing in the country, severe deficiencies in essential statistics, a paucity in published research and the urgency for finding practical means of promoting improved marketing performance), it would be imperative that the research be concerned with analytical description of agricultural marketing systems and operations in this country, or for that matter, in most of the developing countries.
ANNEX 5: Rural Research Priorities: Agricultural Economics Perspectives

By

Dr. O.L.E. Mbatia
Department of Agricultural Economics
University of Nairobi
A number of changes have taken place during Kenya's post-independence period. Some of these changes have resulted from overt government policies and programmes while some have come about as a direct consequence of a growing population's reactions to changing times. Being a developing country, the external forces on the economy (for example through exports, tourism, imports of vital goods, foreign exchange fluctuations and political ideologies) had significant influences on the economy.

All these influences and changes over the years have impacts that vary from sector to sector. Our concern here is how the rural sector has been adjusting its climate in response to the various impulses. The general contention, of course, is that the rural sector is disadvantaged in various respects, not just in Kenya but in most of the developing countries. To help provide a better understanding of Kenya's rural sector and how it has been transforming over the years, we are recommending that research efforts be centred on the following socio-economic aspects.

Crops

There are two major categories of crops to be considered. The first group is that of cash crops
(e.g. tea, coffee, sugar, horticultural crops) and the second one is that of staple food crops (e.g. maize, beans, pigeon peas and cassava).

For crops traded in the international markets, research should endeavour to establish domestic costs of production as well as ways of lowering such costs and improving quality and marketing efficiency in order to increase Kenya's competitive status. Emphasis of export crops may lead to neglect of food crops which are vital for food security. Research should therefore aim at providing policy alternatives that maximize foreign exchange earnings without compromising food security status. Ways should also be found for maximizing returns to labour and land particularly for the small scale sector which relies predominantly on these two resources.

Special attention should be paid to horticultural crops. There are many small farmers involved in the production of horticultural crops. These farmers tend to be exploited by middlemen who often purchase their produces at throw-away prices. Research should emphasize marketing channels and efficiency as well as policies on prices and trade. Again we need some analysis on production
costs, transportation costs and prices received by exporters. These should be compared with those of our competitors in the foreign markets.

The domestic demand for horticultural crops also needs some attention. In order to lower our costs of production and compete effectively in foreign markets, we need a strong domestic market. Very little is currently known about the domestic demand structure for various horticultural commodities.

Livestock

An on-going monitoring and evaluation programme in production, marketing, pricing and policy for livestock is vital. For example, the government has established price differentials on milk: farmers are paid higher prices during the dry season of the year and regular prices during the normal season. The government recently deregulated meat prices. These are examples of policies whose efficacy in terms of inducing the desired responses from producers, traders and consumers should be assessed. Hence we need to raise and answer a number of questions: - Is the market working efficiently? Who is benefitting: the farmers or the sellers of meat or milk? Should the markets be regulated? Where are the constraints in the marketing system? Many more questions could be asked.
Natural Resources

The suitable land for rainfed agriculture in Kenya is only 18 percent. The rest of the land falls in the category of arid and semi-arid lands. Since independence, land has been sub-divided into small family farm units. The large scale farms, and some of the rangelands, have also been going through sub-division. The population estimated at 20 million in 1988 is growing rapidly at an annual rate of 4 percent. This has put a lot of pressure on land. Research is needed to analyse the land utilization in the country. This could examine the problem of efficiency of land use, comparing the large scale farming with small scale farming. Some policy questions should be addressed regarding such macro issues as food policy, food security, labour use and land sub-division in relation to land use. The feasibility of instituting a land tax which had been proposed way back in the 1970s should be investigated. The land tax could bring the underutilized land into productive uses thereby improving food production.

Other important natural resources requiring research attention are water (including water use rights and efficiency) and forests and forest resources. The
competition that often prevails between forest conservation efforts and arable farming needs conceptualization in long term perspectives.

Research on Rural Employment

The rural people are mainly employed on agricultural activities. The majority of them are school leavers, children, uneducated women and men. There should be knowledge on how much labour is required on different enterprises. Research on the labour market and labour input requirements for each crop is also needed.

The cash crops, mainly tea, coffee and horticultural crops, are labour intensive and in some areas, farmers experience acute labour shortage. Although Kenya is regarded as a "labour-surplus" economy, there is a likelihood that labour shortage constitutes one of the major bottlenecks to increased production. Whether labour shortages are a manifestation of purely economic factors or not is a question that must be answered through research.

Adoption of Fertilizer and Other Farm Inputs

Farmers have realized the benefit of applying fertilizer to their crops in order to achieve higher yields. The application of fertilizer differs from
place to place as well as from crop to crop. It has been noted for example that the coffee-producing smallholders in Murang'a district apply 26 times as much fertilizer to their coffee as do smallholders in Meru. In 1983/84, it was realized that a shilling spent on fertilizer yielded KShs. 10 - 14 of revenue for tea and coffee growers, KShs. 4 for wheat growers and only KShs. 3 for maize growers. This kind of information regarding the benefits of fertilizer use, as well as information on availability of credit, should be made available to farmers by extension workers or through mass media.

In view of the foregoing discussion, it is necessary to study fertilizer use by commodity and region, stocking and import needs, farm constraints and credit requirements. The channels of distribution and the policies on import, prices and profit margins for stockists should also be studied.

The farmers' adoption of certain technologies such as the use of improved seeds, fertilizers or capital intensive techniques depends on their appropriateness in terms of economic, social, cultural and physical circumstances. We need to analyse availability of such technologies in rural areas and determine the constraints that limit their
adoption by farmers. It would be worthwhile to know to what extent availability of improved technologies is limiting increased production by small scale farmers. It is possible that other social and political factors are the culprits.

Institutions

The government parastatals and private institutions play an important role in fostering agricultural production. They provide vital services such as marketing of agricultural produce and the provision of credit and infrastructure necessary in agricultural production. These institutions must therefore be stable and predictable if costs associated with risks and uncertainty are to be minimized in agriculture.

Terms of Trade and Linkage Between Agricultural and Non-Agricultural Sectors

Agricultural and non-agricultural sectors are interdependent and linkages prevail in factor markets and product markets. The terms of trade between the two sectors are such that they tend to favour the non-agricultural sector. This has caused production in agriculture to stagnate. There is therefore a need to examine the terms of trade between the two sectors in order to reveal problems and possible solutions.
In conclusion, we might emphasize that the resources available for all the tasks to be done is quite limited. This underlines the importance of focusing on those issues deemed most important. This seminar can contribute by identifying the most urgent research needs. We may point out that the first of these needs is a catalogue of research that has already been done and why their recommendations are not treated seriously by policy makers and even by our own government planners. Research must be designed by our own social scientists, or at least with their collaboration. And, there must be a dialogue between the social scientists and policy makers if the high costs of poorly designed rural projects are to be minimized.
ANNEX 6: LIST OF PARTICIPANTS

1. Dr. Ackello-Ogutu, A.C. Agricultural Economics, UON
2. Dr. Acquah, B.K. Egerton University
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10. Mrs. Kimenyi, L.N. Agricultural Economics, UON
11. Mr. Kiche, Z.O.A. Institute for Development Studies, UON
12. Dr. Maritim, H.K. Agricultural Economics, UON
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32. Dr. Riak, I.C                  Institute for Development Studies, UON
33. Mr. Shihemi, W.M.              Ministry of Agriculture
34. Prof. Waelti, J.J.             Agricultural Economics, UON
35. Dr. Yambo, M.                  Department of Sociology, UON

Administrative Support

36. Mr. Kimani, T.                 Agricultural Economics, UON

Drivers

37. Mr. Ireri, F.M.                Agricultural Economics, UON
38. Mr. Mwaura, J.                 Range Management, UON
39. Mr. Musyoka, J.                Institute for Development Studies, UON
ANNEX 7: SEMINAR PROGRAMME

Thursday 28th April, 1988

DEPARTURE FROM NAIROBI

3.00 p.m. Minibuses DEPART from Main Campus Car Park
3.40 p.m. Minibuses DEPART from Car Park opposite Faculty of Agriculture Building
5.00 - 6.00 p.m. Arrival at Safariland Lodge and Registration of Participants
6.00 - 7.00 p.m. Refreshments
7.30 - 9.00 p.m. DINNER

Friday 29th April, 1988

SESSION I: Chairman, Dr. C.O. Okidi

8.40 a.m. Participants Assembled in Conference Room
8.45 a.m. Welcoming/Introductory Remarks - Seminar Coordinator (Dr. A.C. Ackello-Ogutu)
9.00 - 10.00 a.m. OFFICIAL OPENING - VICE-CHANCELLOR, University of Nairobi - Professor P. Mbithi: Represented by Professor G.M. Maloiy, Principal College of Agriculture and Veterinary Sciences
10.00 - 10.30 a.m. TEA/COFFEE BREAK
SESSION II: Chairman Dr. C.O. Okidi

10.30 - 12.30 p.m. DISCIPLINARY PAPERS

10.30 a.m. Institute for Development Studies (Dr. P. Alila)

10.45 a.m. Department of Sociology, University of Nairobi (Dr. E.K. Mburugu)

11.00 a.m. Ministry of Agriculture (Mr. J.N. Kamunge)

11.15 a.m. Department of Economics, Egerton University (apologies accepted)

11.30 a.m. Department of Economics, University of Nairobi (Dr. K.K. Mukherjee)

11.45 a.m. Department of Agricultural Economics, University of Nairobi (Dr. O.L.E. Mbatia)

Rapporteur: Dr. S.G. Mbogoh

Supported by: 1. Mrs. L.N. Kimenye
               2. Mr. G.M. Rubiik

11.45 - 12.00 BRIEF RECESS

SESSION III: Chairman, Dr. J. Gingerich

12.00 - 1.00 p.m. DISCUSSION

Discussion Openers' Remarks

Dr. C.A. Odegi
Mr. G.K. Njiru
Dr. D. Rocheleau
Mr. Z.J. Mwangi
Miss J. Gachagua
Annex 7 Cont'd

SESSION IV: Chairman, Dr. J. Gingerich
2.15 - 3.15 p.m. Discussion Openers' Remarks (Contd) and Open Debate

SESSION V:

WORKING GROUP SESSIONS (CHAIRMEN)

3.15 - 5.00 p.m.
GROUP I Commodities (Dr. H.K. Maritim)
GROUP II Technologies and Practices (Dr. M. Yambo)
GROUP III Human Resources (Dr. I.C. Riak)
GROUP IV Natural Resources (Prof. J. Waelti)
GROUP V Commerce and Rural Industrialization (Mr. L.M. Awiti)
GROUP VI Economic Policies (Dr. W. Oluoch-Kosura)

Saturday 30th April, 1988

SESSION: WORKING GROUPS (Cont'd)

8.00 - 10.00 a.m. Concretization of Recommendations
10.30 - 11.30 a.m. TEA/COFFEE BREAK
10.30 - 11.30 a.m. Preparation of Group Reports by Rapporteurs

SESSION II: Chairman, Mr. J.B.W. Matata
Rapporteur: Dr. S.G. Mbogoh
Supported by: 1. Mrs. L.N. Kimenye
             2. Mr. G.M. Rubiiik
Annex 7 Cont'd

11.30 - 12.30 p.m. Group Reports (Rapporteurs)
  GROUP I  Commodities (Mr. Shihemi)
  GROUP II Technologies and Practices (Mr. Mulinge)
  GROUP III Human Resources (Dr. Ngethe)
  GROUP IV Natural Resources (Mr. Mukumbu)
  GROUP V Commerce and Rural Industrialization
             Mr. Kiche)
  GROUP VI  Economic Policies (Mr. Nyangito)

12.30 - 1.15 p.m. DISCUSSION
  12.30 p.m. Dr. M. Yambo (Discussion Opener)
  12.40 p.m. General Discussion
  1.00 p.m.  Synthesis by Overall Rapporteur:
             Dr. S.G. Mbogoh
  1.15 p.m.  FINAL CLOSING REMARKS by Dr. K. Kinyanjui
             Director, Institute for Development
             Studies, University of Nairobi

LUNCH

DEPARTURE

3.30 - 3.45 p.m  Minibuses depart from Safariland Lodge

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