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THE ROLE OF PUBLIC BUREAUCRACY IN AGRICULTURAL
DEVELOPMENT: A THEORETICAL PERSPECTIVE.

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ABSTRACT

The effectiveness of agricultural extension bureaucracy can only be meaningfully understood in the context of the objectives of agricultural development which is an integral part of the overall developmental process. The paper therefore discusses the evolution of two concepts, agricultural and political development to put into proper perspective the role of extension bureaucracy in agricultural development in particular and development generally with emphasis on rural development.

The thrust of the paper is to spell out the usage of bureaucracy and agricultural development, the two key concepts in this inquiry. It locates agricultural extension as a subsystem of the overall governmental or public bureaucracy having a large role to play in the developmental process. Factors both internal and external i.e. task environment, influencing the effectiveness of agricultural extension bureaucracy are identified by juxtaposing it to the classical bureaucratic and other models which have been used to explain the functioning of bureaucracies basing the inquiry on organisation theory and development administration literature.

THE ROLE OF PUBLIC ENTERPRISES IN ECONOMIC DEVELOPMENT: A THEORETICAL ANALYSIS

by
M. S. Swamy

ABSTRACT

The abstract discusses the role of public enterprises in economic development. It highlights the importance of public enterprises in providing essential services and infrastructure. The text emphasizes the need for a clear policy framework to guide the operations of these enterprises. It also discusses the challenges faced by public enterprises, such as inefficiency and lack of accountability. The abstract concludes by stating that public enterprises can play a significant role in promoting economic growth and development, provided they are properly managed and supported by the government.

The main body of the paper is divided into several sections. The first section discusses the theoretical framework for public enterprises. It examines the different models of public enterprise ownership and management. The second section discusses the role of public enterprises in economic development. It highlights the importance of public enterprises in providing essential services and infrastructure. The third section discusses the challenges faced by public enterprises, such as inefficiency and lack of accountability. The fourth section discusses the policy implications of the findings. It suggests that the government should provide a clear policy framework to guide the operations of public enterprises. The fifth section discusses the conclusions of the paper. It states that public enterprises can play a significant role in promoting economic growth and development, provided they are properly managed and supported by the government.

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INTRODUCTION

The wide extent of government involvement in developmental activities in the newly independent states of Africa in particular is no longer a matter for debate.¹ This is clearly borne out by the fact that in virtually all areas of social economic and political action a burden of proof - to fulfil expectations, if not commitments - has come to rest upon government. Government agencies are on many fronts directly engaged in attempts to translate policy into action even though the effect of such action may often prove problematic or give birth to some unintended consequences. Arguing on similar lines La Palombara goes a step further pointing out that in many places government is the only significant social sector willing to assume responsibility for transformation.² The net effect has been a great expansion of government agencies as well as emergence of new ones and a proliferation of functions resulting in relatively greater strength of government vis /vis^a other sectors. The Kenyan case, clearly spelled out by the Ndegwa Commission, sums up the issue very well.

There is one overwhelmingly dominant party which experience has shown, does not itself formulate new policies; other organisations which could contribute to policy formulation are relatively few and weak; and the dependence of the economy on government activity for ensuring rapid growth is even more marked than in industrialised societies. We therefore consider it to be not only inevitable but essential that the civil service should be called upon to assume even greater responsibility for managing the economy and for identifying and solving national problems.³

The areas of government involvement for example range as widely as from agricultural extension on the one hand to educational innovation on the other or from community development to institutionalisation of basic local structures and administrative process. This raises the question of what form the involvement should take in the various numerous activities. More specifically how government should organise itself for these purposes. Given the aspirations, what pattern of administration seems most efficaciously related to goal achievement. To what degree are the attributes of the classical bureaucratic model accommodated in such a pattern. What are the relationships with the various groups supposed to be served? What is the resulting level of effectiveness or alternatively are there manifestations of inefficiency and/or other dilapidating factors that lead to ineffectiveness?

1. Paul J.C.N. and Dias, C.J. "Law and Resource Distribution", Background paper for Law and Rural Development Seminar at Kisumu 1977, pp 2-3.
2. La Palombara, J. ed, Bureaucracy and Political Development, Princeton U.P. 1963, p.5.
3. Kenya, Republic of, Report of the Commission of Inquiry (Public Service and Remuneration Commission), 1970-71 Chairman D.N.Ndegwa, Nairobi, Govt. Printer, p.2.

It is the aim of the whole inquiry to try and answer the foregoing questions by examining the role of public bureaucracy in agricultural development focusing on agricultural extension. It is necessary, however, before embarking on extension analysis to clarify our usage of the two key concepts bureaucracy and development in view of their wide usage in the social science literature that has resulted in their having, especially the latter, both positive and negative connotations.

THE CONCEPT OF BUREAUCRACY: ITS ORIGINS AND RELEVANCE

Right from the early periods when the term bureaucracy was gaining currency there has been a notable lack of consensus among the various users of the concept. In early usage while some used it to refer to a form of government where power is in the hands of officials others used it as a collective designation of those officials.⁴ This initial state of affairs has been worsened by the fact that various writers to the present have continued to hold divergent views on the subject. Marx conceiving of power as the product of a group's place in the economic order of society saw officials simply as the agents of governments, the instruments of the dominant class. This position did not see the bureaucracy as posing a problem of analysis since it could not be conceived as a separate element distinct from the state or the economic order.⁵

An appropriate formulation recognising the power of the permanent paid official as an inevitable feature of modern government was advanced by Mosca, Michels and Max Weber. It was in fact Weber who started a systematic conceptualisation of the importance of the paid official. Mosca's and Michel's conception of bureaucracy was simply that it is a body of salaried officials. Michels also took up the theme of reasons for a bureaucracy's position in the ruling class of a modern state. Thus the politically dominant classes maintained their position while the insecure middle classes sought security in state employment. In the treatment of bureaucracy by both writers it was however only loosely linked with the concepts of power, administration and authority. These were an essential part of the analysis which constituted a point of departure for Max Weber's analysis.⁶

Max Weber is generally recognised as a dominant influence on the development and much of the thinking on the concept bureaucracy, controversies and disagreements over his formulation notwithstanding. He for instance, and much of the

4. Albrow, M, Bureaucracy, Pall Mall Press, London, 1970 pp 18-20

5. Ibid p.31.

6. Ibid pp 36-7.

disagreement revolves around this, did not define the term. He instead took care to specify the features of what he considered the most rational form of bureaucracy which forms the core of his ideas on the subject. Rational bureaucracy according to him has the following now familiar features, professional qualification, full time commitment, strict separation of the individual's resources from those of his job, salaried contractual employment, centralisation of control and supervision, hierarchy of offices, functions of the offices clearly specified, a career structure and personal freedom for staff members observing only the impersonal duties of their offices.

Weber maintained that in societies which have reached a certain degree of economic and social complexity and in which the desirability of controlling the exercise of power, through legal norms has been accepted, rational or legal authority is exercised through a bureaucracy. It should be pointed out in this connection that bureaucracy was called rational because it was a form of legal authority and not because legal authority was necessarily associated with rational bureaucracy.⁷ He further expressed the much debated view that bureaucratisation by which he meant the growth of the features of rational bureaucracy was an inevitable process.

It is therefore remarkable, in view of his preoccupation with positive elements of the bureaucracy, that he paid a close attention to the problem of bureaucratic power which he saw as growing with increased bureaucratisation. The sources of this power could be seen in the special knowledge which the official possessed. First he had a specialist's knowledge of disciplines essential to administration in the modern world e.g. economics or law. Secondly, in the course of his duties he acquired a great deal of concrete information much of it artificially restricted by ideas of confidentiality and secrecy.

Since the development of Weber's ideal type bureaucracy one dominant view held particularly in western society is that it is the most efficient form of social organisation in which all action is rationally ordered to the achievement of specific aims and goals through means and action designed and justified by the social participants. Be that as it may there have been criticisms and lengthy debates on Weber's ideas some of which are of great import for this discussion and should therefore be taken into account. Thus we can be able to determine the extent to which the original formulation is applicable to the particular situation under study.

7. Ibid p 63.

Parsons questions the internal consistency of Weber's ideal type. He draws attention to the fact that Weber's administrative staff was defined as having professional expertise as well as the right to give orders. Such attributes, he argues, may well give rise to conflict within bureaucracy since it will be impossible to ensure that high position in the hierarchy of authority will be matched by equivalent professional skill. The problem for members of the organisation will then arise of whom to obey, the person with the right to command or the man with greater expertise.⁸ In current terms that Weber did not see a possible conflict between the growth of formal rules and application of scientific knowledge. Indeed modern emphasis on the necessity of giving experts a free hand, or flexibility in administration, on job enlargement, on increasing discretion, runs counter to Weber's predictions of ever-increasing formalisation.⁹

A major controversy aroused by Weber's basically positivist stance which still goes on today stems from his lack of concern for the problem of bureaucratic inefficiency or "bureaupathology" to use Victor Thompson's term.

Merton argues in an essay questioning the idea of rational bureaucracy that emphasis on precision and reliability in administration may well have self defeating consequences. Rules designed as means to ends may well become ends in themselves. The graded career structure of the bureaucracy may encourage him to an excess of the virtues he is supposed to embody: prudence, discipline, method. Governed by similar work conditions officials develop a group solidarity which may result in opposition to necessary change. Where officials are supposed to serve the public the very norms of impersonality which govern their behavior may cause conflict with individual citizens. What Merton is stressing is that, a structure which is rational in Weber's sense can easily generate consequences which are unexpected and detrimental to the attainment of an organisation's objectives. In other words that bureaucracy may also mean inefficiency.¹⁰

An analogous version of what in sociological language, Merton terms dysfunctional consequences of bureaucracy is provided by the work of Philip Selznick. Concentrating upon the division of functions within an organization, he shows how sub-units set up goals of their own which may conflict with the purposes of the organisation as a whole. The remedy for this, the setting up of new departments to counteract the tendencies of the old, only exacerbates the situation by creating more subunit goals.¹¹

8. Ibid p 56

9. Ibid

10. Merton, R.K. "Bureaucratic Structure and Personality", in Reader in Bureaucracy edited by R.K. Merton et al., The Free Press, Glencoe, Ill. 1952 pp 361-71

11. Selznick, P. TVA and the Grass Roots, Harper Torchbooks, NY, 1966.

The intention of Merton and Selznick is not to point out inconsistencies in Weber's propositions on rational bureaucracy but rather to show that the formal specification of organisation structure which he outlined is insufficient as a description of how bureaucrats will in fact behave. The official has characteristics as a social being beyond those which the administrative code specifies. Like other men he has interests, prejudices and fears. He forms friendships and cliques.¹²

The place of rules the main instrument for influencing actions of bureaucrats in Weber's rational bureaucracy has also been specifically questioned. It is argued that all rules have to be applied to particular cases, and in deciding whether a case falls under a rule an official is called upon to make a judgement. In the exercise of his judgement the official is caught in a dilemma since 'too great a compliance with statutory rules is popularly denounced as bureaucratic. Too great a reliance on initiative, in order to realise the spirit, if not the letter, of the law is popularly denounced as an abuse of power-----'

The demonstration that rules can only be incomplete guides to action not only implies that factors outside the rules must be taken into account by the social scientist in interpreting the action of officials. It also highlights the necessity of choice with which every administrator is faced.

It is held against Weber in view of the findings on rules that he appears to permit his bureaucrat to elude all responsibility of his actions. He acts either out of technical necessity or in accord with instructions.¹³ However while the crux of this latter argument on the place of rules is stressing that the bureaucratic structure is contained within a larger society and others for example Merton cited above delineates unanticipated consequences of Weberian bureaucracy an important convergence point that one can easily identify in the various arguments is agreement in questioning the rationality and/or efficiency in Weber's idea type.

Finally there is a major strand of criticism of direct relevance to non-western societies advanced by authors such as Blau¹⁴ This group has approached Weber by asking what in a given situation would constitute rational administration. Blau in particular concludes that in a changing environment, the stable attainment of organisational objectives depends on perpetual change

12. Ibid

13. Ibid

14. Blau, P., The Dynamics of Bureaucracy, Univ. of Chicago Press, Chicago, 1955.

in the bureaucratic structure. Others carry the argument to a higher plane pointing out that there is no warrant for saying that Weber's ideal type will always prevail over other administrative systems.¹⁵

A significant development out of this type of criticism has been the repeated effort to move away from what is regarded as the monolithic nature of Weber's ideal type towards empirical research to find out just which characteristics do distinguish different administrative systems and which are held in common. This has in turn led to an important methodological shift guided by the view that characteristics of Weber's ideal type may each be regarded as a variable.¹⁶ Thus a hierarchy of authority may exist to varying extents in different organisations, and it may or may not be accompanied by selection procedures based on examinations.

It is evident from the foregoing discussion that there are several meanings attached to the concept bureaucracy e.g. ruling group of officials, instruments of the dominant class, method of government by officials, public administration, administrative efficiency or inefficiency, administrative system, the modern organisation etc. We have also noted different methods of identifying the phenomenon which are basically either through description or analysis. Such fluidity in meaning and methodology can be attributed mainly to the fact that change in organisation structure especially since Weber's time has meant the adaptation and extension of his terminology accompanied and at the same time facilitated by refinement of methods of analysis.

However it has frequently happened that Weber has been taken as a starting point and the position reached that organisation and bureaucracy are regarded as synonymous. The rationale for this position is deduced from Weber's view of administration. For Weber administration meant the exercise of authority. There had to be some who only received and never gave orders. Yet the mode of organising administrative staff which he called the ideal type of bureaucracy, involved no principals which could not be applied in the structuring of the whole membership of an organisation. The requirements of professional qualification, fulltime commitment, strict separation of the individuals resources from those of his job, contractual employment etc can be attached to any organisation position. If these principles were applied generally and at the same time the fact of diffuse

15. Gouldner, A.W. Patterns of Industrial Bureaucracy. The Free Press, Glencoe, Ill, 1954. Hyden, G. et al., eds. Development Administration: The Kenyan Experience, Oxford UP, Nairobi, 1970.

16. Hall, R.H., "Concept of Bureaucracy-an Empirical Assessment" American JI of Sociology, Vol. 69, 1963, pp 32-40.

distribution of authority throughout an organisation was recognised it would not be inappropriate to speak of the whole structure as a bureaucracy.¹⁷

This corresponds to the broad view of bureaucracy to be adopted in this analysis i.e. bureaucracy as synonymous with organisation. The addition of the prefix "public" before bureaucracy simply refers to the fact that the particular bureaucracy in question is a governmental organisation rather than a private non governmental organisation. In brief we are talking about a governmental administrative agency which we term a bureaucracy due to diffuse distribution of authority throughout the organisation. Furthermore this usage of bureaucracy as synonymous with organisation permits us to refer to the whole government structure, one government agency or part thereof as public bureaucracy just as organisation is conventionally used to refer to a system or subsystem.

In our analysis we shall like many other students of organisation from the time of Weber to the present use the bureaucratic model as the basis for conceptualising the system of interrelationships in organisations as well as the relationships with their environments. It is, however, commonly accepted and this implied in the various rivalling usages spelled out above as well that there is a duality¹⁸ in Weber's ideal type of bureaucracy. On the one hand it contains empirical elements which were formulated in an inductive way, by observing certain characteristics of concrete organisations. On the other hand, it contained assumptions about the attributes of such elements (i.e. about their efficiency), assumptions which were derived intuitively from the alleged ideal meaning of such structure: their rationality.¹⁹ In this analysis a selective use will be made of both these empirical and evaluative aspects of the duality in view of the questions being raised. We are not only concerned with characteristics of the bureaucracy but also with its effectiveness.

A point worth reiterating which constitutes a basic assumption of this analysis is that there is no warrant in saying that Weber's ideal type will always prevail over other administrative systems. As convincingly argued by Ostrom in this connection no single form of organisation can be presumed to be "good" for all circumstances, in contrast to Weber's presumption regarding the technical superiority of bureaucracy over any other form of organisation.²⁰ Thus

17. Ibid

18. Ibid

19. Mouzelis, N.P., Organisation and Bureaucracy: An Analysis of Modern Theories, Routledge and Kegan Paul, London, 1967.

20. Ostrom, V., The Intellectual Crisis in American Public Administration, Univ. of Alabama Press, 1973. Diamant makes the more relevant statement that no single institutional or behavioral pattern can be said to characterise the process of political modernisation, nor is there a single way to organise the administrative and to staff the public bureaucracy of a developing society. "Bureaucracy in Developmental movement Regimes" in Riggsfed. Frontiers of Development Administration, Duke University Press, 1970. La Palombara op cit p20 makes the point with specific reference to the United States.

while rejecting the deterministic aspect of Weber's argument his bureaucratic model serves as a base for capturing later formulations and even earlier ones and blending these to help us conceptualise the functioning of an administrative system appropriate to the situation under study. In other words how bureaucrats in this particular situation behave.

To analyse bureaucratic behavior we look at two broad areas. First is the role of bureaucratic rules and procedures in the internal functioning of the organisation. It is held that the degree to which there are dysfunctional consequences is an empirical question. The focus is therefore to be on investigating the response of the bureaucrats to the rules. We should however bear in mind the fact noted above that rules are only incomplete guides to action although they are of crucial importance within the organisation. In addition other factors apart from the rules such as informal grouping, degree of professionalism, existence and acceptance of a characteristic ethos or ideology etc which may possibly influence such behavior are of major interest to us.

A second area is the organisation's environment which is also a relevant consideration when talking about the rules taking into account the view that it is inherent in the nature of complex organisations that the bureaucrat will decide issues on the basis of rules and procedures that will often seem irrelevant to the client.²¹ Of greater importance and probably accentuating such behavior is the particular relationships between bureaucrats and their clientele emerging from their interaction which are bound to affect most behavior not only of the bureaucrats but of the clientele as well.

It is a generally accepted point among students of organisations that the strengths and/or weaknesses of any particular type of organisational arrangement is significantly determined by that structure's relationship to its environment.²² Selznick in the study already cited hypothesised that the TVA's grassroots policy must be understood as related to the need of the organisation to come to terms with certain local and national interests. In actual practice this procedure resulted in commitments with restrictive consequences for the policy behavior of the Authority itself.

21. Schaffer, B.B., "The Deadlock in Development Administration" in Colin Leys, ed., *Politics and Change in Developing Countries*, London, Cambridge UP 1969, p22.

22. Perrow, C. *Organisational Analysis: A Sociological View*, Balmont, Cal.: Brooks/Cole 1970.

23. Selznick op. cit.

In the relationship of bureaucrats vis a vis their clientele a possible leverage that the former may have due to possession of material resources, technical knowledge or simply information not available to the rest of the populace as pointed out by Weber is of special concern. In other words do bureaucrats gain a distinct group status or adopt a particular type of behavior due to their expertise, salaried position etc or are they mere instruments of the ruling class. It is also possible that among the bureaucrats themselves differential possession of these resources may have widely differing behavioral consequences in relation to the environment and for individuals or groupings based on these or other differences in the bureaucracy. Alternatively it may very well be that it is the arrangements in the environment be they economic, political or social that constitute the major factor conditioning the functioning of the bureaucracy.

In sum it is being argued that there are a number of factors both internal and external to the bureaucracy which influence its behavior. Furthermore the interrelationships among these factors cannot be ruled out. The concept of political field defined as the totality of relations among actors oriented²⁴ towards the same prizes and/or ideology by and large sums up our concerns.²⁵

ON DEVELOPMENT: Public Bureaucracy and Agriculture in Perspective.

The somewhat specific concerns of this discussion preclude a detailed consideration of the broad concept of development which has been much more widely debated in different social science disciplines yielding many more formulations than the concept of bureaucracy. For some it suggests economic growth and industrialisation; for others nation building and modernisation or state power and defence. Sometimes the word is associated with democracy and social justice. It has even yielded a diametrically opposed formulation of underdevelopment that is enjoying wide currency in the analysis of trends in the Third World Countries.²⁶ Suffice it to note that there have been sound criticisms of earlier formulations of the concept for having been culture-bound, unilinear, dichotomous, deterministic etc. which have greatly aided a refinement of the concept.

The objective here will therefore be to relate it to our discussion of public bureaucracy and more so agricultural development in order to throw light on the underlying perspective of the process of change which is what development is in essence. Public bureaucracy can be directly linked to the concept of

24. Oriented: interested, involved.

25. Van Hekken and Van Velzen, Land Scarcity and Rural Inequality in Tanzania Mouton, 1972.

26. Leys, C., Underdevelopment in Kenya: The Political Economy of Neo-Colonialism, Heineman, 1975, Ch 1.

political science discipline and agricultural development to economic development with roots in the economics discipline. It should however be remembered that the political and economic aspects are by no means mutually exclusive in the actual development process and that the distinction made is only for purposes of analysis.²⁷

That there are not only economic but also non-economic or human factors as well influencing the process of development is now common knowledge. Time is past when as clearly manifested by the initial stages of development planning in newly independent countries there was a dominant pre-occupation with economic variables. The practice then was to have economists, in most cases foreign, draw up development plans sitting at the capital. Their substantive concern was with the accuracy of their models and not with political-administrative variables, such as the input decisions of politicians and administrators who were supposed to implement the plan, leave alone the people whose needs the plan was supposed to serve and who were also expected to participate in the implementation. At any rate, a healthy outlook²⁸ on development has been the concern with the second group of or non-economic factors. This has led to the recognition of conceptualisation of development in disciplines outside economics for example political science where political factors influencing the development process have been subsumed under the rubric of political development.

PUBLIC BUREAUCRACY IN POLITICAL DEVELOPMENT

Political Development in the developing countries was originally conceived on the basis of research, also conducted from the capital, with a strong emphasis on instruments of change such as political parties, ideologies and charismatic leaders in comparison to what actually changes in the process of political development. This stance in the first place is premised on the democratic myth which assumes that all political systems will be based upon electoral competition between parties once 'preconditions for democracy' are established. This overlooks the fact that several technologically advanced states with a high degree of literacy e.g USSR have only one party and that the African preference for a similar or some other system may not be a temporary phenomenon linked with a low level of modernity.²⁹ In more general terms it is

27. Leys op cit p ix

28. The planning case exemplifies a broader outlook of western theorists who have blurred the distinction between political development and economic modernisation and frequently view the former as a dependent variable contrary to trends in Africa that clearly show that economic modernisation does not necessarily lead to political development.

29. Klinghoffer, A.J. "Modernisation and Political Development in Africa," J. of Modern African Studies, Vol. 11 No. 1 1973, pp 1-2.

basically the pluralistic assumption in the analysis of political development postulating that power relations in capitalist societies are, or trend toward, and ought to be pluralistic. It involves the notion that with development power becomes dispersed or widely diffused in different sectors of society.³⁰

Secondly, the underlying assumption of the stance with its close attention to parties reveals a major short coming which is of direct relevance for our present concerns. It is the lack of attention accorded to the public sector - particularly the bureaucracy³¹ - as an important independent variable that greatly influences any kind of transformation in the developing countries, more so outside the centre, be it social, economic or political. The public bureaucracy is now well recognised as a relatively strong institution in the developing countries worth paying much more attention to^{than} the parties. First because it is the only organisation that has achieved a significant degree of institutionalisation in "Western" norms and procedures. Largely because it is perhaps the one colonial institution in which African socialisation and participation has been long and continuous. Secondly, the most highly educated people particularly in former British colonies chose and continue to choose careers in government. This results in a concentration of talent in the civilian bureaucracy³² and enables the bureaucracy to exercise leadership and take developmental initiative.³³

Failure to realise this fact can only be attributed to the view taken of the role of the public sector by those who subscribe to the above original formulation of political development. For them the public sector is engaged in what is termed public administration. In essence what they mean by this is that the major if not the only function of administrators is to implement policies formulated by politicians. To them development administration means a concern with the improvement of public services which therefore has a universal application and there is no reason why such matters should vary from one case to another

30. Ocampo J.F. and Johnson D.L. "The Concept of Political Development", in Cockcroft J., et al (eds) *Dependence and Underdevelopment*, Doubleday, NY, 1972, Ch 13. This outlook of comparative politics as exhibited specifically by writings on development administration is discussed below.

31. Bureaucracy used to refer to the whole governmental structure in this section on overall political development. Soon after independence focus of studies was on political parties, trade unions and voluntary associations because these organisations carried on the independence struggle often over the opposition of the bureaucracy.

32. Lofchie, M.F. "Representative government, bureaucracy, and political development: the African case," *J. of Development Areas*, Vol.1 No.1, 1967.

33. Hyden G., et al, eds. Development Administration: The Kenyan Experience, Oxford U.P., Nairobi, 1970, p xv.

particularly between the so-called developed and developing countries.³⁴

The view in question not only implies a bifurcation between politics and administration but is also the fundamental reasoning on which the myth of neutrality of bureaucracy is based. It is however now well established that even colonial servants for whom claims of neutrality have been most pronounced such neutrality is not reflected by reality. It is only a myth rooted in the reluctance of the colonial civil servants to realise that "almost anything they did altered to some extent the distribution of goods and services and above all, the focus of power within the community"³⁵.

Public bureaucracy as a functional component of political development can best be understood, bearing in mind the link drawn earlier between bureaucracy and administration, if subsumed under the notion of development administration which can also usefully aid our efforts of linking up the two concepts of bureaucracy and development. In fact one of the fundamental assumptions of the development administration literature³⁶ is that bureaucracies should be agents of change within their societies, contributing heavily to social development and economic growth (as well as providing expanded services). As argued by Swerdlow³⁷ there are, or should be, many important and clearly recognisable differences between public administration in a poor country, striving to attain self-generated economic growth and public administration in high income countries. Officials must make enough different decisions, adopt enough different activities to warrant the distinctive designation. This implies the establishment of a new way of conducting administration in less developed countries or at least setting up conditions for the new form of administration. There is however no agreement among writers on the

34. Mackenzie W.J.M., Politics and Social Science, 1967, Waterston, Development & Planning - Lessons of Experience, 1965. Ilchman has broadly classified them as belonging to "administrative systems approach" school which assumes that improved administration is successful administration. Administrative system is treated in autonomous terms and concern is less with content than process of administration. This is in contrast to the 'social system approach school' that takes the social context into account and will form the basis of our analysis.

35. Finucane, J.R. Rural Development and Bureaucracy in Tanzania: The Case of Mwanza Region, The Scandinavian Institute of African Studies, Uppsala, 1974, p 24.

36. It is important to note that overall much of the literature and many of the theories and models on development administration relate to Asian experiences with a strong areal and case-study orientation. The study of government administration in Africa is described by Hyden op cit as being in an embryonic stage.

37. Swerdlow, I. ed. Development Administration: Concepts and Problems, Syracuse, 1963.

subject on what constitutes the most effective administration to meet the pressing demands of developing countries. There are primary differences on factors relevant to change, appropriate time periods within which to expect change and the sequence for reforms.³⁸

The most dominant trend of thinking on development administration which informs our analysis has been labelled the social systems approach.³⁹ The approach derives in part from the debate over the slowness of change, especially economic, in the developing countries, and in part from a growing concern with the impact of administrative programs on social behavior. It views society as composed of interdependent 'subsystems'. A change in one subsystem ultimately brings change in others and finally a change in the whole of the social system. A second major assumption distinguishing the approach is that different administrative systems are "natural" to different stages of social interaction. The introduction of processes and institutions from one stage to another is likely to produce unintended consequences. The concept of stages it should be noted is often used to illustrate major changes that have taken place yielding such common terms as "traditional", "transitional", "agrarian", "industrial" etc.⁴⁰ Thirdly the social system perspective writings usually imply a longer time span in which changes take place.⁴¹

Two alternative strategies have arisen from the social system approach i.e. the "balanced social growth strategy" and the "unbalanced social growth strategy". The first variant has many parallels with the balanced growth theorists in economics. Effective administration, defined as that which can meet changing and increasing demands, is dependent on creating in society autonomous yet interdependent centres of power that can provide resources for and exact performances from each other. Without them, the bureaucracy misallocates resources, usually to its own advantage. It is also assumed that power is scarce. If it is concentrated in the hands of a bureaucracy other sectors in society become dependent and weak, no longer performing their interest "articulation" and "aggregation"

38. There is no agreement on definitions which has resulted in ambiguity. See Khosla J.N., "Development Administration - New Dimensions", Second Conference of the Directors and Principals of Institutes of Public Administration in the Commonwealth, Jan. 1967 and Kasfir, No., Prismatic Theory and African Administration, World Politics, Vol. 21 No. 2, 1969.

39. Ilchman, W.F., "Rising Expectations and the Revolution in Development Administration" Public Administration Review.

40. Riggs F.W., "Agraria and Industria" in William J. Siffin (ed) Toward the Comparative Study of Public Administration, Bloomington, Indiana, University Press, 1957 pp 23-110.

41. This approach is not diametrically opposed to the administrative systems approach cited earlier. Both assume that some systems are more capable than others of meeting new and increasing demands. It is the reason given for this capability that basically distinguishes advocates of the two approaches. Social system approach looks to the interrelationship of factors in the social system to find the source of higher productivity as opposed to the rationality concerns in the administrative perspective or parts thereof of the administrative systems approach.

functions. A Big Push is needed to develop institutions independent of the bureaucracy in order to improve administration. Furthermore this discussion often employs the conception of "vicious circles."⁴²

Fred Riggs with his theories which primarily aim at exploring both external and internal behavior of the bureaucracy best exemplifies this strategy. The two dimensions of administrative behavior that he regards as important are the weight of bureaucracy (or degree of its institutional participation in rule-making) and its "scope" (range of values affected by its activities). Traditional bureaucracy is characterised on one end of the spectrum by great scope and limited weight while modern bureaucracy is marked by both limited scope and limited weight at the opposite end of the spectrum. He advances the proposition that administrative efficiency of the bureaucracy varies inversely with the weight of its power. In essence he argues that the more control bureaucrats have over themselves the more they are free to do as they please. So it happens in prismatic society characterised by absence of political institutions capable of controlling the bureaucracy and the latter is consequently in an "unduly" strong or heavy weight position.⁴³

In a second example of writings subscribing to this strategy the vicious circle argument is apparently evoked to the effect that strengthening administration leads to an imbalance between the administrative and the political and hence to greater need of leaders to exploit politically the administrative services. In order to achieve more effective administration it is necessary to broaden and more explicitly organise the nonbureaucratic components of the political process.⁴⁴

The great contribution of Riggs in particular on the thinking on development administration cannot be over-emphasised. On the positive side there are certain attractive features of his work. First is the emphasis it places on developing a model that will permit comparison among the administrative structures of various countries, particularly new nations.⁴⁵ This is a step forward from earlier attempts to compare the formal administrative procedures in one country with those in another. Secondly, the framework of variables relevant to administration is broadened to include ecology thereby increasing the potential richness of

42. Ilchman, op cit.

43. Riggs, F.W. Administration in Developing Countries: The Theory of Prismatic Society, Houghton Mifflin Company, Boston, 1964.

44. Pye L. in Swerdlow op cit. also Pye L. Aspects of Political Development, Little Brown and Co., 1966, p.38.

45. Riggs, Ibid.

later analysis. Thirdly, his discussion of the shifting bases of power in the sala is a reminder not to place excessive trust in analyses of formal administrative structure.

There are, however, certain problems with Riggs's formulation and with the balanced growth strategy generally that makes them somewhat antithetical to our concerns. First is that the bureaucratic model is taken for granted and used as a given starting point of analysis rather than a set of prescribed relations that requires its own explanation. A second weakness is the assumption that rational administrative behavior, as defined in western countries, will only become possible as these societies acquire basic characteristics of western society. Only as these societies become more differentiated will they develop political systems in which a strong legislature and a plurality of competing interest groups check the bureaucracy. Only at that stage will these societies have developed secondary relations and entrepreneurial attitudes that allow the existence of an innovative and "plan-minded" administration. This is the pluralistic argument writ large. The outlook has rightly been branded intellectual neo-colonialism by Marxists and others who have more recently questioned its underlying assumptions.⁴⁶

Thirdly, we are left observing the administrator from outside. We do not see him in his structural context and how prescribed rules and public role influence his behavior. It has been perceptively pointed out in this regard that it would be wrong to assume that all administrative behavior in developing countries can be subsumed under a single global proposition that in the absence of effective "western" control on administrators they will pursue their private interests at the expense of public policy. There surely must exist some organisational structure which no doubt affects administrative behavior.⁴⁷

The second variant of the social systems approach, the unbalanced social growth strategy,⁴⁸ however, closely coincides with our concerns here. Although it also assumes the interrelationship of various factors of society it seeks empirically and inductively to discover how different configurations affect the type and functions of bureaucracy. It does not assume "a fortiori" the scarcity of power argument and envisions situations where bureaucracy may serve to develop

46. For a detailed criticism of Riggs along these lines see Kasfir op cit. Ilchman has suggested that given the inputs at their disposal and the margin next to which they live public servants in developing countries are among the most rational allocators. "Decision Rules and Decision Roles: Some Thoughts on Explanation of Productivity and the Productivity of Explanation," paper for Conference on Comparative Administration, Arusha.

47. Kasfir N., "Development Administration in Africa: The Balance Between Politics and Administration", *Canadian Journal of African Studies*, Vol 3 No.1 1969.

48. "Theories of Administrative Behavior in Africa" *African Review*. It is further pointed out that an important implication of taking this stance is that the extensive body of literature on administrative behavior and organisation theory based on selectivity drawn upon by a student of development administration.

49. Ilchman Ibid.

autonomous yet interdependent centres of power.

Its proponents are not interested in abstract administrative improvements, but in more effective ways for the public sector to produce tons of fertiliser and foodgrains, to improve seeds etc.⁴⁹ Emphasis is placed upon political ideology and shifting political alignments, especially as they affect the administrative capacity to produce change in society at large. Unlike the balanced social systems strategy it is more empirical and tentative and less prone to the pessimism of the vicious circle argument.⁵⁰

In brief the merits of the latter strategy lie in its avoidance of administration qua administration focus of the administrative system approach. It also avoids conceiving the bureaucracy too abstractly and too monolithically as the balanced social growth advocates seems to do. It alone seems to deal with concrete programs, empirical indicators and a 'common sense' understanding of bureaucracy.

AGRICULTURAL DEVELOPMENT: EMERGENCE, SCOPE AND ITS OPERATIONAL BASICS

It was with the resurgence of interest in analysing the determinants of economic growth mainly after World War II that the economics profession turned its attention to the study of economic development,⁵¹ to better understand the anatomy and physiology of the growth process and to formulate prescriptions for appropriate development policies and strategies. A major rationale of such interest advanced was that the productivity gap between the developed and developing countries widened sharply. For instance it was pointed out that the developed nations which had been, on balance, net importers of food grains prior to War II became net exporters of food grains to the low income countries. There was a special arrangement under which much of this grain was moved to the developing countries in the form of food aid or sold on concessional terms as opposed to the normal terms of international trade.

The initial widely held belief during this period regarding relative contribution of agricultural and industrial development to national economic

49. Public servants in developing countries most rational allocators in existence-efficient through not effective. Ilchman, Ibid.

50. Esman, M.J. 'The Politics of Development Administration' in Montgomery and Siffin eds Approaches to Development, Politics, Administration and Change, McGraw-Hill Book Co. NY., 1966. Weidner, E.W. Technical Assistance in Public Administration Overseas: The Case for Development Administration, Chicago, 1964.

51. At the very minimum, economic development involves something more than economic growth or put differently development means growth and change. Certain essential qualitative dimensions in the development process may be absent in the growth or expansion of an economy through a simple widening process. The focus here is on development and growth is only of concern as part of that process.

growth was that industrialisation was the unique key to development. Thus the industrial sector, as the advanced sector, would be the source of alternative employment opportunities to the rural population, would provide a growing demand for foodstuffs and agricultural raw materials which it would process for domestic consumption or export and would begin to supply industrial inputs (e.g. fertiliser) to agriculture.

It became fashionable to use as an analytical and planning framework one-sector models which because of their completely aggregative and simple production functions, with only investment as an element, emphasised at least implicitly investment in infrastructure and industry. The one-sector, one input nature of these models precluded any measurement of the sectoral production effects of alternative investment allocations and of different combinations of factors (since it was implicitly assumed that factors could only be combined in fixed proportions with investment). In the absence of either theoretical constructs or empirical information on the determinants of agricultural output, the tendency was to equate the modern sector with high productivity of investment and vice versa for the backward agricultural sector and thus direct the bulk of investment to industry and industrial infrastructure.⁵²

It was out of an attempt to understand the relationship (or lack of relationship) between lagging traditional sector and a growing modern sector within non-western societies affected by economic, political and military intrusions of Western colonialism that a dual economy approach using two-sector models emerged.⁵³ Even though economists continued to assign to subsistence agriculture an essentially passive role as a potential source of "unlimited labour" and "agricultural surplus" for the rest of the economy. Not only was it assumed that the farmers could be released from subsistence agriculture in large numbers without a consequent reduction in agricultural output but also that they could do so while carrying their own bundles of food (i.e. capital) on their backs. One popular policy prescription to encourage the above transfer for labour and of the agricultural "surplus" was to turn the terms of trade against agriculture.

Furthermore the foregoing view relying heavily on aggregate economic models with few easily quantifiable variables such as GNP, Capital Investment,

52. Thorbecke, E. ed. The Role of Agriculture in Economic Development, National Bureau of Economic Research, NY, 1969, p.3

53. Lewis, W.A. The Theory of Economic Growth, Homewood, 1955.
"Economic Development with Unlimited Supplies fo Labour," The Manchester School, May 1954.

Fei, J.C.H. and Ranis, G., Development of the Labour Surplus Economy: Theory and Policy, Homewood, Illinois, 1964.

exports and imports etc, was of major consequence for development strategies of the societies in question worth noting particularly with regard to resources critical to development and the "locus in quo" of development. It was assumed that the major constraints to economic change were capital, technology and skilled manpower. In the case of Kenya, for example, a cursory inspection of earlier development especially the 1966-70 one as well as Sessional Paper No.10 of 1965⁵⁴ bears this out. There is a strong emphasis on foreign aid expectations and the two main purposes for which aid was sought were capital to be invested in manufacturing industries and to ease the so-called manpower bottle-necks.

The springboard for development where whatever amount of these resources available was to be concentrated initially were the urban industrial centres, the main if not the only locus of development. Thus the national planning strategies followed by Kenya and most of the developing countries rested on the premise that industrialisation would help generate sufficient momentum which would trickle down to the rural areas thereby providing an avenue for the rural populace to participate in the development process.

As the dual economy models became more sophisticated and realistic it was increasingly recognised that the functions which the agricultural and industrial sectors must perform in order for development to occur are totally interdependent. On the one hand, the agricultural sector had to release resources for the industrial sector which in turn had to be capable of absorbing them. On the other hand, the release of resources, by and of itself, and the absorption of resources, by and of itself, were not sufficient for economic development to take place. These conditions should occur simultaneously and this release-cum-absorption of labour and capital resources was recognised as the key to development. The recognition of active interdependence was a large step forward as neither sector was identified as either leading or lagging in contrast to the former industrialisation - first prescription.⁵⁵

Thus whereas in the past agriculture, at first the whole sector and then the subsistence sector, was often viewed as the passive partner in the development process it came to be typically regarded as an active co-equal partner with the industrial sector.⁵⁶

54. Government of Kenya, African Socialism and Its Application to Planning in Kenya, Sessional Paper No 10, 1965 Nairobi.

55. Meier, G.M., Leading Issues in Economic Development, Oxford U.P., 1970, pp391-2.

56. Two subdivisions of the dual economy approach can be discerned here i.e. static and dynamic dual economy models. While the former emphasised limited interaction between the traditional and modern sectors the latter attempted to trace increasing interaction between the two sectors in the process of development.

Even though the two sector model recognised agricultural and industrial interaction, two fundamental points were not addressed explicitly: foreign trade and determinants of agricultural output. It is beyond the considerations of this analysis to take up both issues. We should however note in passing in connection with the first that as a result of the neglect one witnessed a closed economy as opposed to an open economy analysis. The end result was failure to consider dependence on primary exports, price fluctuations and inelasticity etc. As to the latter, the concern with the problem of economic development, specifically in the low income national economies, that emerged and has persisted is how to transform traditional agriculture into a viable source of sustained growth at least in food production, a useful pointer to the problem this analysis is focussing on.

This shift in orientation in retrospect is a reflection of an increasing need for analysis of the agricultural development problems of these economies characterised by a seemingly static agricultural technology rapid increases in the demand for farm products in response to population and income growth, and the "pathological" growth of urban centres. It also represents pragmatic response to the lack of success of much of the development effort and development assistance that has been attempted by both national and international agencies in areas outside of the western economic system especially in the third world countries.⁵⁷

Recent analysis guided by the new orientation have come up with the weighty conclusion that it is agricultural stagnation which is largely responsible for the high rate of migration from poverty-stricken rural to urban areas in Kenya for example. And the spiralling urban unemployment that is one of its consequences, is a major cause for concern with the current level of development in the rural sector as a whole and in particular agricultural development. It is in the rural areas that the vast majority of the population of the developing countries resides and earns its livelihood from agriculture. In Kenya this amounts to some ninety percent (90%)⁵⁸ of the population of the country, ninety-five percent (95%) of whom depend on agriculture for their living.

It should however be remembered that rural development objectives extend beyond any particular sector. They encompass improved productivity, increased employment and thus higher incomes for target groups, as well as minimum acceptable levels of food, shelter, education and health. A national programme of rural

57. Hayami, Y. and Ruttan V.W., Agricultural Development: An International Perspective, The John Hopkins Press, Baltimore, 1971, p2. It is this lack of success that characterised the much heralded UN Development Decade.

58. For the whole African continent despite extensive desert and semi-desert areas the figure remains at well over eighty percent (80%).

development should include a mix of activities comprising projects to raise agricultural output, create new employment, improve health and education, expand communications and improve housing.⁵⁹ It is in this light that the view of the recent ILO mission to Kenya that the problem is more of rural poverty and landlessness than unemployment as such can be understood. The focus on agricultural development is therefore because it is an ubiquitous problem in rural development and hence overall development. Thus it is a necessary but not sufficient condition to be met if development is to be realised to any meaningful extent. In fact growth in agricultural output is in most societies essential to the overall development process and the contribution of agricultural growth to the development process is positively related to the rate of productivity growth in the agricultural sector.⁶⁰

The most important ways in which increased agricultural output and productivity contribute to overall economic development have been adequately summarised in five propositions worth noting.⁶¹ First economic development is characterised by a substantial increase in the demand for agricultural products and failure to expand food supplies in pace with the growth of demand can seriously impede economic growth. Secondly expansion of exports of agricultural products may be one of the most promising means of increasing income and foreign exchange earnings, particularly in the earlier stages of development. Thirdly, the labour force for manufacturing and other expanding sectors of the economy must be drawn mainly from agriculture. Fourthly, agriculture as the dominant sector of an underdeveloped economy can and should make a net contribution to the capital required for overhead investment and expansion of secondary industry. Fifthly, rising net cash incomes of the farm population may be important as a stimulus to industrial expansion.

An implicit assumption underlying the above propositions is that the agricultural development process will function in an appropriate fashion and lead to a rise in productivity and output. This can easily create an impression that the agricultural sector has very few problems that need to be addressed explicitly or worse still that it is devoid of problems. This however may not be and is in fact nearly always not the case. One fundamental problem which is the concern of the present analysis is in what ways agricultural production can be increased.

59. World Bank 1975 in Vergese, T.C., "Agrarian Reform and Rural Development: An Analysis of Their Interrelationship" International Seminar, Agrarian Reform, July 1977, p9.

60. Hayami and Ruttan, op cit p3.

61. Meier, op cit p412.

There is an apparent consensus that owing to the great variability in the conditions of agricultural production e.g. physical conditions, farm to farm results of agricultural programs plus human and other factors affecting even planned development, it is difficult to derive a universally acceptable theory of agricultural development. However, in any attempt to evolve a meaningful perspective on the process of agricultural development a necessary first step is to abandon the view of agriculture in the so-called traditional societies as essentially static.

An important landmark in the formulation of this perspective is Theodore Schultz's thesis.⁶² He insisted that peasants in traditional agriculture are rational, efficient resource allocators and that they remain poor because in most poor countries there are only limited technical and economic opportunities to which they can respond. Contrary to earlier assumptions regarding the availability of a body of agricultural technology that could be readily diffused from high productivity to low productivity countries, and the existence of significant disequilibrium in the allocation of resources among progressive and lagging farmers in the developing economies, this perspective viewed agricultural technology as highly location specific. Thus techniques developed in advanced countries are not in most cases directly transferable to less developed countries with different climates and different resource endowments.

Therefore when viewed in a historical context the problem of agricultural development is not that of transforming a static agricultural sector into a modern dynamic sector, but of accelerating the rate of growth of agricultural output and productivity, consistent with the growth of other sectors of a modernising economy. Likewise, a conception of agricultural development should provide insight into the dynamics of agricultural growth i.e. the changing sources of growth.

For the purposes of this discussion agricultural development is viewed as having two distinguishing components. First, agricultural expansion in the sense of extending widely accepted technology to the cultivation of additional land. Secondly, agricultural development as increasing the output per acre of land by appropriate changes in farm inputs and practices.⁶³ To be sure some of both

62. Schultz: Transforming Traditional Agriculture: An important relevant criticism of the thesis is that in view of the fact that education and research are typically public goods not traded through the market place it remains incomplete as a theory of agricultural development since the mechanism by which resources are allocated among education, research and other alternative public and private sector economic activities is not fully incorporated into the Schultz model.

63. Agriculture improved both in per capita productivity level (per land unit and labour hour unit) and in composition of production.

agricultural expansion and agricultural development comes about through what one might call "autonomous" changes in behaviour in response to changes in the natural and human environment that can consequently accelerate agricultural development. Even though there are ways in which agricultural expansion and development can be purposefully accelerated and a number of approaches, some of which are noted below, have been suggested to that end.

One approach emphasises technological change with regard to farm production. It concentrates on research, on plant breeding, pest and disease control, and soil fertilization as basic to agricultural development. In addition, engineering research to develop the tools, implements, and draft power to carry out constantly changing farm technology is also considered basic.

A second approach puts emphasis on economic profitability and can take a number of forms. One form is an emphasis on creating a pattern of farming localities each offering local agricultural support services that, taken together, enhance each farmer's opportunity and incentives for more productive farming. This is the "agricultural infra-structure" argument. Another form of economic approach to development gives specific attention to land tenure arrangements as these effect farmers' economic incentives as well as the distribution of political power. Yet another economic emphasis is to urge a revision of credit availability assuming that the obstacle must be cleared away before other important aspects of agricultural development can be available to farmers.

A third approach focuses on the necessity for agricultural education and training through schools, youth and women clubs and extension of education. This particular approach is based on the argument that changed patterns of farming of agricultural support activities and of sound policies and administration can only come into being as individual persons gain new insights and new skills to provide both specialist competence and broad general understanding.

A fourth one is a commodity approach which takes two forms. One form is to select one for which a favourable market demand exists and for which prior research has identified feasible means of substantially increasing production and then to concentrate on all efforts on the spectrum of changes, whether in research, extension, credit or marketing arrangements, that may be needed to achieve increased production of that one crop. The other form is to select one or several crops for which a satisfactory market demand exists, set targets of increased physical production of each, estimate the requirements of different farm inputs needed to meet the output targets and then take steps to have those inputs, in proper

quantities and at the right times, made available to farmers.

Fifthly, agricultural development can be accelerated by improving the capacity of the land to support increased production through irrigation, drainage and erosion control. These activities may accelerate agricultural expansion where they are applied to lands not previously cultivated or agricultural development where the land is already cultivated but higher yields or multiple cropping can be made possible by improving the quality of land.

The purpose of this brief review of various approaches which is by no means exhaustive is neither to pin-point a panacea, a short cut, to agricultural development, nor advocate a single emphasis approach. The problem of agricultural development is much too complex for that. It is an example of what can be called a "systems" problem, one of many facets, with multiple complementaries, essential prerequisites and sequences and many feedbacks. An important feature of the above various approaches is actually that the elements are not mutually exclusive categories. Each tends to concentrate on a single aspect of a complex phenomenon.

Such concentration is essential in the operation of specific programs to spur agricultural development, but this should not become the basis for formulating overall strategies because of the tendency to neglect certain equally essential elements.⁶⁴ The point being made is that there are inter-relationships in the system which should be borne in mind although it may be necessary for purposes of analysis to focus on a particular facet or specific program and thereby fail to treat all the inter-relationships fully. At any rate in practice changes experienced by one facet are likely to be of consequence to the rest of the system due to these inter-relationships.

AGRICULTURAL EXTENSION BUREAUCRACY

In this analysis, a comprehensive conception of agricultural extension as a subsystem within the larger system of the components of agricultural development is adopted to capture the relevant inter-relationships. The inter-relationships of major concern are not only those of the extension service components internal to it but also those linking it with the environment in which it actually performs for the overall agricultural objectives. The concern as hypothesised is with both the internal and external functioning of the extension organisation

64. Mosher, A.T. "Agricultural Development" in Leagans P.J. et al. eds, Behavioral Change in Agriculture: Concepts and Strategies for Influencing Transition, Cornell U.P., Ithaca, p20.

as they affect the provision of technical information to the farmer and supply to him of goods and services intended to enhance his agricultural productivity.⁶⁵

This may on the face of it suggest adoption of the third approach listed in the previous section. But in actual fact there is a need to consider various elements of all the approaches listed, thereby facilitating efforts to ascertain total performance: the past, present and expectations of an improved future performance. The elements include technology at the disposal of the extension service, credit or other production incentives to be distributed, crop targets it has to cope with and whether these are in any way aided by the existent agricultural infrastructure plus the possibilities of increasing production through irrigation or drainage. It is the interaction with its clientele via these elements that constitutes agricultural activity observable in the extension bureaucracy's environment which forms a useful basis for determining its performance and hence effectiveness.

That an organisation's environment is of great consequence to both its internal and external functioning has already been noted. Furthermore, it is argued in the foregoing paragraph that it is within the environment, that agricultural activity which we are interested in assessing the extent to which it is influenced by extension bureaucracy, takes place. It is therefore necessary at this stage to be more explicit about the extension bureaucracy as well as the environment in question. This can best be done by first specifying the extension bureaucracy itself and then identifying the relevant elements in the environment with which it may have linkages.

INTERNAL ARRANGEMENTS

In its formal organisational structure the Ministry of Agriculture (MOA) is precisely similar to the Administration. The latter is basically the law enforcement arm of the government but having important co-ordinating functions over the various specialist agencies as well as other local institutions. It forms the core of the presence of the government in the rural areas and most often the various ministries have been constructed so as to parallel it. A comparison of the Administration and the MOA from the district level downwards in the diagram below accurately depicts these similarities.

65. Alila, O.P. The Role of Public Bureaucracy in Agricultural Development in Kisumu District - Western Kenya, IDS Working Paper No. 277, 1976., p 1.

ADMINISTRATION*	LEVEL	MIN. OF AGRICULTURE
DC	District	DAO
DO	Division	AAO
Chief	Location	LAA
Sub-Chief	Sub-location	JAA

For a number of methodological reasons discussed elsewhere, the district is the level of focus of this analysis. Suffice it to reiterate here that conceptually when discussing the public bureaucracy selecting an administrative unit with organisational "boundaries" facilitates one's analysis by for example enabling one to identify what is external to the organisation and hence their interaction.⁶⁶ Thus the administrative unit chosen here is the district team of the agricultural department who constitute the district agricultural bureaucracy that we have so far simply termed public bureaucracy due to its operation as part and parcel of and according to the norms of the overall governmental structure or alternatively extension bureaucracy to highlight its specific function within that structure.

The agricultural district team is headed by a District Agricultural Officer (DAO). He is supported at the district headquarters by specialist personnel of both degree (Agricultural or Veterinary Officer, AO or VO) and diploma levels (Assistant Agricultural or Livestock Officer, AAO or LO). While VOs and LOs deal with various aspects of animal farming the areas of specialization of the Agricultural Officers include crops, land and farm management, home economics and 4K clubs. There was until 1975, when the post was abolished, a District Cotton Officer dealing specifically with cotton, an arrangement which never applied to other crops in the district.

In charge of each division is an Assistant Agricultural Officer (AAO) who is sometimes joined by a Livestock Officer and/or Divisional Land and Farm Management Officer. AAOs are usually graduates of Egerton College - Form IV division one or two is required for entry into this 3-year course although the current trend is a preference for A - level students with at least one principal pass in a science subject. Staff supporting the AAO at the divisional headquarters are mostly holders of certificates in agriculture (Agricultural Assistants or

* It is the Provincial Commissioner (PC) at the provincial level who actually forms the apex of rural Provincial Administration and his counterpart in the MOA is the Provincial Director of Agriculture (PDA). These positions are however mostly supervisory. In addition the hierarchical distance between the PC and DC is by and large similar to that between DC and DO. Hence our starting from the district in conformity with our level of analysis and also to avoid unnecessary duplication.
66. Alila op cit p8.

Technical Assistants AAs or TAs) or veterinary medicine (Animal Health Assistants AHAs) graduates of Embu, Bukura or AHITI. Very occasionally the AAs and AHAs may be assisted by a Junior Agricultural Assistant (JAA) or a Junior Animal Health Assistant (JAHA) who lack any formally recognised training in agriculture. The latter's rank group proper is the lowest one to be considered below. As in the case of AAOs assigned to the district level but belonging to the rank level below the district there is an apparent overlap between the rank levels.

Each location has a team of extension workers. The agricultural part of the locational extension team usually will be headed by a Locational Agricultural Assistant (LAA) and will be comprised of AAs and JAAs. The AA rank includes a few who joined the agricultural department recently after completing Form IV plus an intensive 2-year course at Embu Institute of Agriculture. The rest in Kisumu district, apart from one who worked his way up the ladder through promotion, were trained at Bukura Institute of Agriculture, before independence, having acquired relatively less formal education but reasonably within limits placed on African education during the colonial period. It is the latter who man 9 out of the 12 LAA posts in the district.

At the bottom of the hierarchy is the JAA rank which is composed of persons with different educational qualifications ranging from primary level education with or without primary certificate to O- level school certificate. A major shortcoming in this rank is that the staff lack formal agricultural training except for irregularly conducted short refresher courses lasting a maximum of three months but frequently of only 2 weeks' duration. Their field assignment is to one or two sub-locations which places them in a position of closest proximity to the clientele to be served as the sublocation is the smallest unit in the Kenyan administrative set up and no staff are assigned below this unit even for other government departments.

Thus the agricultural extension bureaucracy is composed of staff at the district, divisional, locational and sub-locational levels dealing with various aspects of both animal and crop- farming. An important factor bound to affect especially the internal functioning of the bureaucracy worth noting when spelling out its composition is that these aspects of farming organisationally in the MOA fall under three major divisions.⁶⁷ Crop production, Land and Farm Management

67. Although these three dimensions are the ones directly concerned with extension and most likely to be found in any district due to the fact that practically all the extension staff in most districts belong to one or other of these divisions particularly crops they are not the only ones in the ministry. Others include livestock, marketing, Research, Range and Management, Administrative services etc. Furthermore, these more or less departmental lines divisions should not be confused with administrative unit divisions cited earlier.

and Animal Husbandry, each having a line of hierarchy starting from the headquarters in Nairobi and reaching out into the field. One can even get the impression of there being three separate organisations and not one, depending on what level one is looking at the Ministry. There are particularly strong indications of such separateness at the headquarters in Nairobi, and at the provincial and district levels, that is only toned down by the necessity to co-ordinate activities since they are only divisions within the same ministry.

However, below the district headquarters the separateness is far from pronounced or sometimes not even in evidence at all due to the absence of one or more divisions. Even though it should not be overlooked in view of links between whatever divisions present at this level and the higher echelons which is a major factor determining the extent of separateness. The nature of staffing at this level in terms of both quality and quantity depends largely on the MOA's priority project undertakings that in turn determines the range of functions performed and hence the strength of the various divisions. A good case in point is the introduction of grade cattle in two locations in Kisumu district resulting in a relatively high concentration of Land and Farm Management staff in these particular areas. Thus any division may be strong, weak or not represented at all in a particular district depending on the projects undertaken.

Assuming for a moment that a good number of the divisions are adequately represented at this level there are certain factors which could mitigate against pronounced separateness. First, in the bottom most rank there is no specialisation through formal training as already pointed out and the JAAs are variously assigned to deal with specific crops e.g. cotton, Land and Farm Management, Home Economics, 4K Clubs, poultry, soil conservation etc. They can also be shifted on these assignments falling in different divisions of the ministry as the need arises. The TAs are in turn also supposed to come to the aid of all JAAs on technical matters underlining the latter's amorphous grouping in terms of the divisions within the ministry.

Secondly, both the AAO and LAA positions are by and large supervisory, which means that all agricultural staff at the two levels are answerable to them. In view of the relatively small number of staff at these levels, particularly the latter, and the remote location of field staff posts from the district headquarters there are more supervisory type interactions than would otherwise be the case resulting in departmental division lines being blurred.

In addition all agricultural staff get their monthly pay on the same day at the same place, the AAO's office, adding to the interactions. This is

in contrast to the limited interactions at the district headquarters which occur mainly due to the fact that the DAO holds the Authority to Incur Expenditure (AIE), resulting in comparatively more marked divisional lines that needs to be borne in mind when discussing relationships with lower levels. Thirdly, at the lower levels there is a great requirement of team effort not only among the divisions of the MOA but even more so across ministerial boundaries necessitating close co-operation with other departments notably the administration and cooperatives.

TASK ENVIRONMENT

The foregoing specification of the extension bureaucracy has been in terms of area of operation, tasks it is charged with, lines of hierarchy, authority levels based on both educational qualifications and departmental specialization plus possible linkages among the departments. It should now serve as a useful pointer to the elements in the bureaucracy's environment interaction with which constitutes the essence of its external functioning. In identifying these elements an important distinction made in the ensuing discussion is that the overriding concern is not with the everything in the district outside the extension bureaucracy i.e. district environment, but with only certain elements outside it which affect it.

A useful concept subsuming such elements is task environment defined as containing those elements relevant or potentially relevant to (the organisation's) goal setting and goal attainment.⁶⁸ This is undoubtedly still a broad concept but it has certain advantages compared to district environment. The latter is a descriptive concept while it is an analytic one. It is also a relational concept: elements in the task environment may alter if the organisation's goals and operations change. Essentially, the relationship between an organisation and its task environment is one of exchange and unless the organisation is judged by those in contact with it as offering something desirable, it will not receive the support necessary for survival. In addition, an important consideration for an organisation like extension bureaucracy is that goals and operations may be perceived differently in the field from the centre thereby greatly influencing the resulting type of task environment. Thus while agricultural development is the

68. Thompson, J.D., Organisations in Action: Social Science Bases of Administrative Theory, McGraw-Hill Co, NY, 1967, p27-28. Thompson points out that the remaining environment can be set aside but not discarded for two reasons. (1) patterns of culture can and do influence organisations in important ways, and (2) the environment beyond the task environment may constitute a field into which an organisation may enter at some point in the future.

declared goal of the government and remains our concern we must also pay attention to the differences in perceptions of goals and operations with the centre that the extension bureaucracy might have which may still or may not fall within the confines of this very broad goal.

Agricultural extension programs aim particularly at improving the performance of farm people in ways specific to the program being undertaken such as modification of farming practices or changes in market practices. Programs for the modification of farm management for example focus on such practices as the selection of seeds; the application of fertilizer, the use of water for irrigation or the balance of cropping patterns. Thus although it is frequently basically an information service, for it to be effective it must change the pattern of activities in farming. This requires that the recommendations of agricultural extension agents be made in the form of recommended practices especially for farmers following traditional practices in small subsistence farming found in less developing economies as compared to farmers who have become accustomed to innovations in farming practices such as those in modernised systems of agriculture of Europe and the USA. The latter can assimilate and use information about new practices with relatively very little help from someone.

In sum, the formal goal of the extension bureaucracy is the modification of the system of farming. For the bureaucracy to realize this goal it has to come to terms or cope with certain elements in the environment which constitute its task environment. These are essentially socio-economic and community organisation factors listed below embracing issues pertaining to the abilities of the farmer, his situation and opportunities, tenure status of the farmer and the size and nature of his farm, which actions of the bureaucracy are supposed to influence either directly or indirectly in ways beneficial to the farmer. Which individuals, which other organisations, which aggregates constitute the task environment is determined by the requirements of the technology, boundaries of the domain⁶⁹ defined as points at which the organisation is dependent on inputs from the environment and the composition of the larger environment. The composition of the task environment, the location within it of capacities, in turn determines upon whom the organisation is dependent.

I: Physical Factors in Task Environment:

- (a) The area's ecology and its suitability for agricultural or animal husbandry

69.

Thompson Ibid.

- (i) soil types
- (ii) land terrain
- (iii) rainfall total and its reliability and overall pattern.

II: Population

- (a) Distribution and density of population in relation to natural resources especially land
- (b) the settlement pattern.
- (c) the population growth rate.

III: Community and Culture:

- (a) Level of education
- (b) knowledge of the outside through contact either locally or as a result of migration
- (c) attitudes towards farming especially new practices
- (d) production and marketing organisations
- (e) political network and forces therein particularly the influentials, alliances and/or groupings (formed on status lines)
- (f) dimensions and rate of social change

IV: Local Economy:

- (a) the system of land tenure
- (b) size and nature of farming units
- (c) the technology of land use.
- (d) labour supply and productivity
- (e) capital availability
- (f) infrastructure especially with respect to markets or transportation routes.

V: National Political Economy:

- (a) political leadership objectives and priorities and its overall strategy for development
- (b) resources allocated for use by extension bureaucracy e.g. personnel, funds, equipment etc.
- (c) agricultural infrastructure provided e.g. credit institutions, markets, transportation routes, storage etc.
- (d) agricultural research findings on land and crops e.g. plant breeding, pest and disease control, soil fertilisation etc.

(e) agricultural projects initiated ranging from specific ones such as introduction of grade cattle to long term broad ones such as soil conservation or irrigation.

(f) Government overall departmental structure: terms of service, control from the centre within the ministry and rules governing norms and attitudes of government officials, ministerial operations and their relationships.

Although these factors are all relevant or potentially relevant to goal as well as sub-goal setting and attainment, their impact and dimensions obviously vary within the district depending on the agricultural character of any particular area, that is, their impact is not as isolated factors but within a factorial pattern.⁷⁰ Thus they may in one way or another determine the nature and direction of development effort. Furthermore, at the level of farmer-extension worker contact they may determine first the appeal and practicability of proposed innovations which enhances the chances of their adoption and secondly the approach that is necessary to get people to accept such changes.

The differential impact, it should be emphasised, hinges on organisational capability, a useful conception of which is in terms of power and dependence. In the first place an organisation is dependent on some element of its task environment (1) in proportion to the organisation's need for resources or performances which that element can provide, and (2) in inverse proportion to the ability of other elements to provide the same resource or performance. Secondly, dependence can be seen as the obverse of power. Thus an organisation has power relative to an element of its task environment, to the extent the organisation has capacity to satisfy needs of that element and to the extent that the organisation monopolises that capacity.⁷¹

The actual impact of the various elements in the task environment on the extension bureaucracy can be usefully understood by first drawing a distinction between elements exogenous to the task environment and the endogenous elements and then introducing the latter into a more general scheme as constraints, contingencies or variables according to their impact. These categories of factors, it should be pointed out, are those involved in organisational action when it conforms to an open system logic meaning in short that the organisation is opened to environmental influences.⁷²

70. Chard, E. District Government and Economic Development in Kenya, Ph D thesis, University of California, Berkeley, 1970. p4.

71. Emerson, R.M., "Power Dependence Relations" American Sociological Review, Vol 27, 1962, pp 31-40, quoted in Thompson op cit pp 30-31.

72. Thompson op cit p20.

Exogenous elements as opposed to endogenous elements bring about environmental fluctuations that penetrate the organisation and require the technical core to alter its activities. The primary exigencies to which the technical core is oriented amenable to such changes are those imposed by the nature of the technical task such as the kinds of co-operation of different people required to get the job done effectively. These can be greatly affected by far off removed elements such as world market prices or by very close ones such as foreign aid policies, particularly the leeway for initiation and participation in agricultural projects by international aid agencies, but are all the same exogenous elements.

It can be argued that the central government and the national political setting are also exogenous elements due to the fact that the central government is the largest supplier of the various resources which constitute the input used by the extension bureaucracy. That by varying the kind and/or quantity of these resources it brings about environmental fluctuations that penetrate the organisation requiring major alternations of its activities. The implicit assumption in the argument why it does not hold is that the extension bureaucracy can operate autonomously of the central government rules supposed to govern its activities in relation to these resources. This, however, is not the case. It is to the contrary considered a task environment element in so far as it seeks to limit the discretion or control outright the actions of the extension bureaucracy as its subordinate organisation and also judges its performance. Thus central government elements are directly or potentially relevant to the extension bureaucracy's goal setting and more so to overall goal attainment like other elements of the task environment.

Elements in the task environment can be classified as noted already as constraints, contingencies or variables⁷³ depending on their impact on the organisation as environmental influences. Some factors become constraints in that for some meaningful period of time they are fixed conditions to which the organisation must adapt. Some of the factors become contingencies which may or may not vary but are not subject to arbitrary control by the organisation. In other words that outcomes of organisational action are in part determined by actions of these elements in the environment. And elements which the organisation can control are variables. On the one hand the crucial problem for the organisation in regard to variables which are under control is coordination. On the other hand the crucial problem in regard to constraints and contingencies which are what the economists familiarly call exogenous variables is adjustment since they are not under control.

73. Thomson Ibid.

The constraints that can be identified precisely include soil types, land terrain, rainfall pattern; population : distribution, density, growth rate and settlement pattern; the system of land tenure and unfavourable attitude towards certain farming practices. Among the contingencies the more obvious are rainfall reliability and total; political network and forces that may give, withhold, or altogether discontinue support; and the central government development strategy particularly the resources made available to the extension bureaucracy by the strategy. Once the various resources including technical knowledge, Farmers' Training Centres, demonstration materials, loans it has a hand in administering are secured by the extension bureaucracy they constitute a bulk of the variables under its control.

However, the distinction made between constraints, contingencies and variables is not a hard and fast one. In fact there are instances of overlap under situations of rapid change posing problems for classification. For instance while wide variations in the amount and occurrence of rainfall from year to year make the total ecological factor a crucial contingency at the same time the great variability in itself can be regarded as a constraint on certain programs.⁷⁴ Similarly changes in governmental socio-economic policies or goals and operations generally can make the socio-economic elements become either contingencies or constraints. But a high frequency of policy change would definitely be a constraint. Also change in social attitudes of the populace on cattle for example can make elements that were originally considered constraints become contingencies or just variables.

Therefore, empirically, a useful guide in establishing the categories of the various elements is a two-part proposition. First that the more heterogeneous the task environment the greater the constraints presented to the organisation. Secondly, the more dynamic the task environment the greater the contingencies presented to the organisation⁷⁵. Thus in our case, one can generally see the first part of the proposition applying to physical factors and population which are subject to a very slow process of change and therefore become more or less constraints depending on the extent of heterogeneity in the district. The second is applicable to the relatively more rapid socio-economic changes triggered off by the thrust of government policy on economic development that to some extent affects even the physical and population factors resulting in the extension bureaucrat being faced for the most part with contingencies.

74. Chard, op cit p6

75. Thompson, op cit p73.

To conclude this section on development, in addition to identifying the various factors influencing the process of change due to the interaction of the agricultural extension bureaucracy and its environment in the agricultural development process as we have already done, we should specify the type of change envisaged. To begin with a key point to understanding the type of change is a recognition of the fact that rural development objectives extend beyond any particular sector, for example agriculture. A rural development programme includes a mix of activities comprising agricultural output, creating new employment, improving health education as well as housing and expanding communications. But it is also true that, although it is only one sector, in view of the fact that agriculture employs a labour force well over 80% of the entire African population in the continent improvement of agriculture both in per capita productivity level (per land unit and labour hour unit) and composition of productions will have far reaching positive consequences for rural development efforts.

Furthermore, in striving for these noble goals it is important to remember the now popularly held view that whether in food, habitat, health or education, it is not the absolute scarcity of resources which explains poverty in the Third World but rather their distribution.⁷⁶ And the mechanism by which the extension bureaucracy aims at improving the system of farming is precisely through the distribution of goods and services or more generally resources.

The crucial issue is therefore one of access to these resources to enable the populace to satisfy their needs. Therefore it is whether extension of these resources ensures an equitable and efficient distribution that points to its role particularly in agricultural development as a crucial component of rural development and hence in overall development in view of the decisiveness of rural development for the latter all-embracing process.

But since access to such resources is usually determined by social and economic structures in society which may not be conducive to an optimum distribution any significant redistribution in the patterns of access may be expected only with some transformation of these structures. Hence the definition of development as deliberately planned action designed to fundamentally alter the economic and social structures thereby effecting a process of resources allocation and its

76. Paul, J.C.N. and Dias, C.J., "Law and Resource Distribution", op cit p3.

close concomitant resource generation, the structural change most salient to development, aimed at sufficient improvements in the life of the majority of the population.⁷⁷ This definition implicitly calls for balanced development and considers the twin objectives of equity and growth as equally important.

77. For a brief but lucid discussion of development and its relationship to social conflict and political power as well as the important notion that development is a normative concept denoting progress in achievement of happiness, dignity and social justice see Migot-Adholla, S.E. "Rural Development Changing Perspectives and Policy Assumptions", Law and Rural Development Seminar Kisumu 1977. For a more detailed treatment of the concept along these lines see Kyong-Dong, Kim, "Toward a Sociological Theory of Development: A Structural Perspective" Rural Sociology Vol 38, No 4, 1973 Uma Lele gives an analogous definition of rural development specifically as improving the living standards of the mass of the low income population residing in rural areas and making the process of their development self-sustaining. The Design of Rural Development, Johns Hopkins Press, Baltimore, 1975, p20.

