THE UTILITY OF A COMBINED PERIODIC SERVICE AND REGULATED MARKET SYSTEM IN THE DEVELOPMENT OF PEASANT FARMING AREAS IN ZIMBABWE

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Working Paper 2/81

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April 1981

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Spatial planners have made their contribution to development planning within the economic growth paradigm which held that growth would most readily result from industrialisation and that rapid industrialisation would most naturally be accommodated in a few metropolitan centres from where its benefits would 'spread'. Planning for the objective of economic growth via industrialisation and urbanisation was seen as a central technical function characterised by econometric modelling allied to sophisticated administration.

Spatial planners added a concern for spatial equity and integration, proposing an ordering of promoted activities at urban, regional and national levels. Their principal contribution has been the notion of growth poles and growth centres.

In recent years the economic growth paradigm has been queried and new approaches proposed. Qualitative judgements rather than quantitative techniques have gained the centre of the planning stage. Development is seen as based on social development with a prime focus on basic needs.

This chapter reviews a recent proposal, along the lines of central place theory, to build Rural Service Centres (RSC) in Zimbabwe's Tribal Trust Lands. It concludes that a less concrete, more organic approach would promise not only greater returns to physical investment but would provide the outline to a more integrated approach to the provision of services, to local market development and regional specialisation, and to community expression and functioning.

The Proposal

The Tribal Trust Lands of Zimbabwe represent poorly developed spatial configurations with weak links into the urban place hierarchy of the country. They are typically served by small business centres most of which do not reach the size used to define rural service centres. The Whitsun Foundation Rural Service Centres Development Study estimates that there are some 2 500 such business centres. The great majority of Zimbabwe's numerous small business centres in the countryside exist at some distance from the relatively few developed urban centres. The Whitsun report identified a serious lacuna in the structure of urban places which exists between the large number of small business centres and the 20 or so proposed small towns included in the Integrated Plan for Rural Development of 1976. The Whitsun report recommends the creation of 300 Rural Service Centres (RSCs) some 15 to 20 kilometres apart, each one serving a population of between 5 000 and 15 000. None of the 300 proposed centres are in areas where the population density drops below 15 per square kilometre. It is believed that the 300 RSCs would cater to over 80% of the population living in the more densely settled half (56%) of the Tribal Trust Lands. Each RSC would cost 400 000 dollars and require the raising of local revenues to sustain annual recurrent costs of about 50 000 dollars.

4. ibid.
The proposal estimates that some 40 to 45 jobs would be created at each ESC or a total of some 13,000 in the country.\(^5\)

The study admits that it has adopted an abstract statistical method. The actual number of rural service centres required could vary from 275 to 320. The study acknowledges that, by limiting ESCs to areas with more than 15 persons per square kilometre it has ignored some 46% of the Tribal Trust Lands with low density populations which hold approximately 20% of the population. It argues that a different approach is required for these areas.

The Whitsun study develops a static framework - Central Place Theory and spatial and numerical standards derived from the existing situation - as the basis for changing the future.\(^6\) Central Place Theory provides little insight into processes of spatial economic development.\(^7\) The static, inflexible framework adopted may constrain rather than promote development in the medium to long term. The study does not explore the relationship between the distribution of power and wealth in Zimbabwe and the lop-sided urban-spatial structure. The maldistribution is reflected in the absence of medium and small-size towns; a factor which investment in towns by itself may not correct. This weakness is further revealed in a belief that the universal aspects of the urbanisation process are a sufficient basis upon which to launch a successful ESC programme. As a result the study relies on Christaller's abstract geometric solution for the optimum location of central places as the basis for the spatial pattern of ESCs. The appropriateness of the assumptions underlying Christaller's Central Place Theory are not explored. The peculiar history of Zimbabwe's development does suggest that a more particular view of the structural problems which exist in the urban hierarchy and of rural dependence is needed.

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5. Total cost $120,000 or $9,230 per job created.

6. This and the next paragraph are derived from comments on the study in a memorandum for DEVAG written by David Cort of the Department of Urban and Regional Planning, University of Cape Town, 25.8.80.

The result, flowing from the simple adoption of Christaller's theory, is that three assumptions are included which may be at variance with the requirement of the situation in Zimbabwe. These are:

1. Production costs (of services) are constant over a uniform plain;

2. Consumers (demand) are evenly distributed;

3. Each type of service has its own net of hexagons (market/service areas) with one production unit located in the centre of each hexagon so as to monopolise the largest number of consumers.

An alternate approach to that of market/service area would be to minimize costs. Such an approach would reverse assumptions (1) and (2) above. It would not lead to an a priori pattern of centres.

The static framework raises several queries. The first is the likelihood that many centres would not call forth the activity required to support them. The second question is the ability of the RSCs as proposed to adapt. For instance, increased income and mobility in the hinterland of a RSC, however brought about, might invalidate the numerical and spatial standards adopted if it led to people by-passing the local RSC for another town.

Government will no doubt introduce investment of this type in a phased manner. The IRDA-1 project document advises a cautionary learning-by-doing approach. The high capital requirements of RSCs and the risks inherent in the programme as proposed suggests that caution will be exercised, at least in the sense that fewer and more obvious centres will be developed in the first phase. That phase itself may turn out to be of a longer duration than fits with the desire to bring the Tribal Trust Lands further into the national service and market system. A more flexible, less costly and less formal approach appears to be needed. Ideally, such an approach would also serve the 46% of the Tribal Trust Lands excluded in the Whitsun proposal.

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The Grain Marketing Board and the Cotton Marketing Board have both proposed the opening of seasonal depots in the Tribal Trust Lands at levels above the RSCs. At the same time it appears that the so-called 'approved buyer system' is likely to be expanded along with renewed co-operative effort. The Agricultural Marketing Authority intends to licence more than one agent in every business centre so as to ensure competition in the procurement of regulated crops. These moves represent an extension of official marketing of regulated crops further down the scale of production. Government have also announced that they will reintroduce the idea of an equalisation of transport costs so that prices paid at depots throughout the country will be equal or nearly equal.

Attempts to equal or nearly equal farm gate prices have been tried in the past in Rhodesia and elsewhere. Experience suggests that, as an isolated policy, it can lead to serious distortions in the spatial distribution of production and in resource use, and to higher overall production costs. Equalisation measures are more acceptable if used as tactics within regional programmes.

In Zimbabwe there is an immediate short-term need to stimulate activity in the tribal areas and for Government to be seen to be redressing the old balance which operated in favour of white farmers. Can short-term stimulation be achieved without leading to distortions in the longer run that may cancel the value of the initial impetus? For instance, the country is capable of producing more maize than is needed for the domestic market. What pricing policies would attract maize production sufficient for the domestic and available export markets while also encouraging a growing degree of regional specialisation in the labour intensive, higher value cash crops, such as cotton and tobacco, that have stronger industrial and export market linkages?

9. Rhodesia has experience from the 1960s in the form of the Transport Equalization Fund which reimbursed trader agents their costs but charged farmers in the TRLs uniformly for transport. The scheme benefitted farmers at a distance from markets and worked to penalise those well placed but who faced uniform charges higher than the cost of delivery. The latter, as is the case when it pays some to 'break the ring', stood to gain from illegal arrangements, which, being successful, ruined the financial structure of the equalisation scheme. It is only when such a scheme is heavily subsidised that discipline can be maintained.
Schemes, such as the Transport Equalization Fund of old and the monopoly extraction of regulated crops from the TTls would appear to contain serious contradictions in terms of both national agricultural production policy and the role of local market growth in regional development.

The growth of the co-operative movement in the 1960s and early 1970s did promise to bring small remote producers into closer contact with the national market and upon more favourable terms. Producer involvement in decision making, group participation, and a greater degree of self-determination did and still can produce tangible results in the form of better understanding of market requirements, more careful grading and bagging, cheaper transport and handling, and greater autonomy in member relations with the storekeepers-cum-agents. Regional and national federations of farmer co-operatives are capable of wielding strong negotiating cards in dealing with the central marketing bodies. In fact, they can offer to relieve agencies such as the Grain Marketing Board of functions it performs at high cost: local administration of numerous trader/agents, the handling of payments to members, local storage and investment in local infrastructure.

The rejuvenation of the co-operative movement will take some time, certainly before it covers the majority of farmers in the Tribal Trust Lands. The room for co-operative endeavour allowed by the arrangements governing the RSCs and the official market structures may well be a vital factor in the growth and effectiveness of the co-operative movement. Strong co-operatives can, in turn, play a crucial role in the development of regional specialisation in accord with spatial, agronomic and market conditions.

A Counter Proposal: a Periodic System with Regulated Market Societies

The development of an urban infrastructure in the TTls has to be capable of meeting several requirements, some of which conflict and all of which change over time. In essence, it has to be able to fill gaps in the provision of services whilst allowing and being able to respond to local factors, initiatives and transformations. What follows is an adaptation of growth centre, periodic market and regulated market concepts. It is designed to offer a least cost, flexible and locally responsive approach to the development of urban centres in the Tribal Trust Lands.

Periodic market systems have existed in Europe in earlier times and are still today a major feature of large parts of east and south Asia, of West Africa and of South America. Their utility is that they provide a regular focal point, usually within walking distance, for local marketing and service transactions within a system of hierarchic arrangements. A series of weekly or biweekly markets, operating for half or whole day, take place in a ring around a central place. Invariably the timing of each market fits within a logical pattern of local activity and of linkages to the central place. The effect is to concentrate the economic and service requirements of remote, small and usually poor communities so that economies of scale are achieved for households and for
merchants, official agents, co-operatives and government services. As markets grow or decline, so the periodicity with which they operate increases or reduces.

A regulated market denotes the constitution of a local society which holds open auctions of agricultural produce. Regulated Market Societies would normally operate within a legal framework provided by government and be fitted into a system of official agricultural pricing. They are often created with more than one aim in mind. Aims could be one or more of the following:

1. To encourage small producers to participate in the sale of surpluses by providing an open auction forum in which groups of fellow producers can participate with a greater degree of confidence in the price ruling at the time than they can dealing with traders.

2. Allied to the first aim is a subsidiary proposition which is that producers in debt to traders may be at a disadvantage when it comes to selling surpluses through the same trader, particularly when some of all of that produce is to pay interest charges or redeem part of the principle of a loan.

3. Conducting open auctions at local levels does bring farmers into contact with wider market trends and is therefore an educational process. Most research has found farmers to be generally well informed about prices prevailing in nearby areas, but that this is dependent in large part upon their physical access to markets.

4. The channelling of local agricultural surpluses through a local institution provides for the development of local governance as well as a point in the movement of goods at which a local levy can be easily and equitably applied. Regulated market committees are therefore potentially powerful bodies able to raise relatively large local resources which can be utilised in the development of local infrastructure and services. Where Regulated Market Societies exist under law, their operation would be supervised and audited by a Registrar. That, as with other registrars, is intended to add confidence to the community in the operation of the auction as well as in the utilisation of the funds raised.


11. The members would determine the levy rate so as to cover costs and to leave a profit for local investment. Government could set a maximum, a minimum or both, but should do so only as stages in the furtherance of member education and society experience.
The design of spatial arrangements and service provision in the Tribal Trust Lands has to accommodate a variety of subsistence and market orientated conditions. On the majority of tribal farms the return to land rather than to labour is the measure of performance because they are predominantly subsistence operations. The bulk of farmers are small and with limited resources. The size of the household may well be the prime determinant of the size of the holding worked. In that case production per unit of the land may be taken as far as possible even if in contrast to spatial considerations. In some areas, mainly because of the growing population pressure and perhaps because of more developed markets and services, the return to land rather than labour will be the key issue in farm management. The larger, better off and better serviced farmers may reflect spatial relations more exactly. As improved service and market arrangements are made, so the primary importance of the size of the household should begin to decline in favour of returns to land. As that happens spatial considerations become more prominent. How effective this transformation will be is dependent upon many factors, in particular the form the flexibility of land tenure systems, the growth of local institutions and government, and settlement and trade patterns. Most agricultural intensification schemes in Africa have failed. Agricultural growth has tended to follow from the expansion of acreage, not yields. In Zimbabwe's Tribal Trust Lands there is little room for the expansion of cultivation. Agricultural intensification has to succeed. It is in this light that proposals for the development of urban infrastructure in the Tribal Trust Lands must be judged.

Despite the caveats entered above, it is likely that in every region a scale of functional hierarchy can be observed. That hierarchy would explain and underline the settlement hierarchy. A series of major studies conducted in the 1960s and 1970s in India, which in many ways reflects conditions in Africa, showed that for different services and levels of services people exhibit "space preferences". This is of course as it should be. However, in India it was found that the lower order services involved little interaction beyond peoples' own village. For nonubiquitous or complex services people, will travel quite substantial distances. For instance, the studies revealed that poor farmers travel frequently over short distances using poor methods of transport to achieve single purposes. In contrast, wealthier farmers travel less frequently but further using better means of transport to achieve a number of purposes.

12. In most of Africa the size of the holding worked remains remarkably constant through periods of price and weather changes. The all-Africa figure is about one acre per person or two acres per labour unit. The pre-occupation with food crops and the limitation imposed by household size are the determinant factors. See, for instance Carr, S., Rural Africans, Faber, 1971, and Boserup, E., The Conditions of Agricultural Growth, London, 1965.

The Indian findings are not only dramatic, they suggest that efficiencies of scale are more likely to be realised at the village neighbourhood level rather than at the central place. They are surely of great interest to Zimbabwe. They serve to raise the question whether it would not be advisable to try to create a network of rural institutions based on, amongst other things, a pattern of distribution of weekly markets in a periodic system.

To raise the place and the role of periodic market systems in Zimbabwe is to demand that the temporal element be added to the spatial component. The former is ignored in the Whitson study. In the scheme proposed, the temporal element would provide much of the initial dynamic to urban development.

The Indian and some of the West African material on rural services and markets suggests that a further component has to be included in the design of urban centres in the countryside. That is the importance of local leadership, however informal. The success of local leadership adds an element of acceptability to the services and institutions at all centres which is as important as their spatial or accessibility factor. Informal leaders play the role of communicators through which others in their neighbourhood are brought to face and accept change. In other words there is a social network in the countryside which is very strong and which is rarely absent in any village or across any space. While the leaders and their followers will vary from place to place, the pattern will have common themes.

Some may object that local leadership, if given its rein, may develop its exploitative character. While this is a difficult field on which to comment in the abstract, it can be stated that local leadership can be more or less valuable in general dependent largely upon the nature of the institutions through which it works. Elsewhere we have argued for strong democratic foundations and for more explicit economic rights based upon Community Land Companies, in local institutions such as Credit Unions and upon programmes which support the weaker individuals while infusing capital into countryside, such as an Employment Guarantee Scheme. Given that backdrop to the design of rural development, it should be possible to proceed with some confidence in the design of institutions which would enhance the role play of informal local leadership at the level of weekly periodic markets.

In theoretical terms it would acknowledge that a formalisation of spatial patterns of interaction is encouraged by the demarcation and use of political, institutional and administrative zones within which much interaction takes place. Also that there already exists a social organisation that both binds and separates groups of people and which affects if not determines the nature of the relationships between them. In short the design of urban centres in the countryside has to fit within institutional and programme approaches, particularly as these determine the level at which decisions are made. It is also important to recognize that the interaction between villages is as important as that between the village and its adjacent metropolis.

The last point can be illustrated by comparing the recommendations of the Whitsun report for Zimbabwe with actual conditions in the tribal belt across central India. The Whitsun report recommends the creation of rural service centres serving a population of between 5,000 and 15,000. This is in the more densely settled parts of the Tribal Trust Lands. In central India some 7 to 10 villages with approximately 7,000 people are served by a central place which itself has a population of between 1,500 to 2,500; the focal point with its sub-system of periodic markets comprises somewhere between 6,000 to 11,000 people. In other words a subsystem based on the lowest order of settlement in the hierarchy which contains approximately half the number of people proposed to be served by rural service centres in Zimbabwe. Added to that is the fact that of the 7 to 10 villages in the 'ring', a majority of villages would have on one day a week a periodic market operating in that village which was well attended by people from that village and surrounding villages. In planning terms, the creation of larger socio-economic and political spaces than that of the single village.

The knowledge gained by recent research into the temporal arrangements of the countryside in India suggests that most villagers can conduct the great majority of their transactions in a weekly market which takes place either in or within close walking distance of their own village. The task that planners have now embarked upon in India is to utilise that very local and intimate sub-system around the lower order settlements to bring administrative and other services close to villagers. Because the economic base of

15. Data from B. Wannmali, op. cit.
16. There are similarities to John Friedman's 'agropolitan district', see his article, 'Agropolitan Development', in UNCRD, 1975, op. cit. pp. 333 - 337.
an urban centre changes over time, it is a poor predictor of urban growth. Long-run urban growth, it has been argued, is more a function of the service sector than of basic activities. In particular, a competitive service sector enables urban centres to replace stagnating basic activities with vigorous new ones. 17

We may now pose the question, whether there is a natural progression in the determination of spatial and temporal relations in the countryside? Is it necessarily the only correct procedure to invest in rural service centres that by the present standard of many other parts of the world are higher order centres, or is it possible to embark upon a dual programme which develops both higher order centres and sub-systems which radiate out from them in the form of a 'ring'? The question can be answered in large part only in terms of the nature of the institutions and programmes that government intends to promote in any one area. Nevertheless, experience elsewhere suggests that the mechanical development of rural service centres has to be questioned and that a richer complex of higher and lower order settlements together with sub-systems of a periodic market system promises to be altogether more effective.

It is now possible to reorder the Whitsun proposal in certain directions. Before doing so we must take note of the proposal contained in THE INTEGRATED PLAN FOR RURAL DEVELOPMENT prepared under the last government. 18 The plan listed twenty potential 'growth points' are towns designed to fall within a so-called middle or lower level of the urban hierarchy with populations of between 2,500 and 25,000 people. The plan estimates that each town's infrastructural cost will total 600,000 dollars at 1977 costs. Each town is planned to consist of 1,000 residential and 100 commercial units. The definition of a growth point includes the basic functions contained in the rural service centre together with more specialised functions, especially those of manufacturing and processing. The proposed twenty 'growth points' are shown in table 1. The table shows the hierarchy of service centres in Zimbabwe according to the 1969 census figures. The Whitsun proposal

is to add 300 more service centres as the lowest level of settlement to the present hierarchy. Below that are the 2,000 odd business centres scattered through the Tribal Trust Lands.

The failure of growth centre policies to generate significant spread effects to lagging hinterlands has been noted by several authorities. Indeed, Benjamin Higgins has asked if development poles exist, that is, cases where investment in manufacturing, perhaps with government subsidies, or in infrastructure or in both attracts propulsive industries to a particular urban centre; with these industries solving the problems of the retarded region by generating spread effects. Higgins points out that there may be a conflict between the goal of accelerating national growth and the goal of improving the urban structure. Certainly, growth centre policies can introduce an infrastructure bias which shifts attention away from critical health, education, market and other services in their hinterlands. Hansen argues that the general failure has placed the burden of proof in the efficacy of growth centres policies upon its supporters. Higgins prefers to see the emergence of central places as historical accidents, as the result of natural resource exploitation, agriculture, forestry or mining, which generates the growth that, at first, is able to sustain an urban centre. Lefeber is more explicit. He demands that, in the case of retarded regions and pockets of unemployment distant from industrial centres, the first planned effort must concentrate on the upgrading of agriculture.

The revised proposal which appears below excludes the twenty 'growth points' proposed for Zimbabwe. Instead, it is proposed that policy and investment concentrate on lower order centres and in more suitable institutional and political choices for the countryside. That should generate the rural economy and the mechanisms needed to sustain growth points of the size envisaged as a natural outgrowth of more active hinterlands.

### TABLE 1

**Existing and Presently Proposed Hierarchy of Service Centres in Zimbabwe**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Centres</th>
<th>Mean Population of Central Functions</th>
<th>Present Investment in Functional Units</th>
<th>Mean No. of Centres</th>
<th>Mean Distance Centres Kms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>386,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>245,000</td>
<td>-</td>
<td>-</td>
<td>370</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>36,000</td>
<td>70</td>
<td>504</td>
<td>130</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>16,000</td>
<td>60</td>
<td>254</td>
<td>80</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>8,000</td>
<td>48</td>
<td>121</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>6,000</td>
<td>40</td>
<td>100</td>
<td>74</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>3,000</td>
<td>27</td>
<td>53</td>
<td>59</td>
</tr>
<tr>
<td>1 Business Centres</td>
<td>108(100)(^1)</td>
<td>1,500</td>
<td>12</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>2400+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed Investment in 'Growth Points'</td>
<td>2-5</td>
<td>20</td>
<td>2,500-25,000</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FSC</td>
<td>300</td>
<td>1,000</td>
<td>&lt;20.15-20</td>
<td>5-15,00</td>
</tr>
</tbody>
</table>

1. 100 Grade 1 centres are in, though poorly distributed over, the Tribal Trust Lands.
Source: Figures from 1969 Census. Table derived from Whitsun report, Table 3, p.44.
Table 2 shows the revision of table 1 utilising the periodic market concept. Revision is in two directions. The twenty growth points are replaced by an increase in the number of grade 1 settlements. This is so because most are in the Tribal Trust Land and therefore can act as central places to a periodic sub-system.

Each grade 1 centre could support ten to twenty periodic markets organised in two or more rings about the central place. Half the number of proposed rural service centres, each together with a periodic sub-system of on average ten daily markets in two rings, would raise the total number of market-cum-service centres in the Tribal Trust Lands from the 400 proposed (grade 1 plus RSC), to 3080, 280 (grade 1 plus RSC) plus 2800 (periodic markets), almost a seven-fold increase in the number of centres. Since this pattern would suit both the high and the low density areas of the TTLs, it represents an order of increase in the high population density areas of about four times that proposed. In other words, a revision of the basic service area, that of the RSC proposed, from about 220 sq. kms, to 400 sq. kms, to a service area per periodic market of 16 sq. kms, to 25 sq. kms. A greater distance between RSCs would result, from 15 to 20 kms, as proposed to about 20 to 30 kms, in the more densely settled half and from 30 to 50 kms, in the less densely settled half of the TTLs. Instead, all villagers would be brought into more intimate contact with periodic markets. For many villagers a market, with services, would operate in or near to their village at least once a week. Moreover, on a further three to four days a week markets would operate in neighbouring villages within 5 kms, in the more densely settled half or within 8 kms in the less densely settled half of the Tribal Trust Lands. Contact with market and services should rise from a few times a year in the case of RSCs, to weekly or more frequent contact in the case of a periodic sub-system.

Maps I and II provide a visual comparison between the RSC structure proposed in the Whitsun report and the alternate periodic sub-system proposed herein. In Map I four existing business centres are upgraded to RSCs, one new site becomes a RSC and the remaining sixteen business centres stay as they are. In Map II, only two existing business centres are upgraded to RSCs. Radiating out from these and from Gutu town are several periodic market rings. The Map illustrates the two rings emanating from Chinyika RSC, in all thirteen market sites which operate from half a day to two full days per week. A number of periodic markets arise outside of any existing business site.

25. These figures accord with the official plan to have a primary school within 5 kms, of rural homes.

26. Presumably, one must expect some existing business centres to enter a period of decline.
### Table 2
Revised Hierarchy of Service Centres in Zimbabwe

Grades 8 - 2 as in Table 1

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number of Centres</th>
<th>Mean Population</th>
<th>Mean number of Functional Units</th>
<th>Mean Distance between Centres kms.</th>
<th>Service Populations</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSC</td>
<td>150</td>
<td>1 000</td>
<td>&lt;20</td>
<td>(20-30)</td>
<td>7-20 000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(30-50)</td>
<td></td>
</tr>
<tr>
<td>Periodic Markets</td>
<td>2 800</td>
<td>40-120</td>
<td>&gt;20</td>
<td>5</td>
<td>1 700-3 200</td>
</tr>
</tbody>
</table>

1. The table takes no account of the 20 proposed 'growth centres'. It is being argued that investment of this nature be deferred.

2. 150 in the TTLs.

3. 20-30 kms. in the more densely settled and 30-50 kms. in the less densely settled halves of the TTLs.

4. 5 kms. apart in more densely settled and 8 kms. apart in the less densely settled halves of the TTLs.

### Table 3
Costs of Whitsun Proposal and of the Proposed Alternate for Urban Places in the TTLs

<table>
<thead>
<tr>
<th></th>
<th>Whitsun Report: 300 RSCs at $400,000</th>
<th>$120,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Whitsun Report</td>
<td>300 RSCs at $400,000</td>
<td>$120,000,000</td>
</tr>
<tr>
<td>b. Alternate Proposed</td>
<td>30 Grade 1 at $800,000</td>
<td>$24,000,000</td>
</tr>
<tr>
<td></td>
<td>150 RSCs at $500,000</td>
<td>$75,000,000</td>
</tr>
<tr>
<td></td>
<td>2 800 Periodic at $10,000</td>
<td>$28,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$127,000,000</td>
</tr>
</tbody>
</table>

Jobs Created:

- **Whitsun**: full-time RSCs 40-45 per RSC
  - total = 13,000
- **Alternate**: full-time 30 Grade 1 at 70
  - jobs = 2,100
  - 150 RSCs at 50 jobs = 7,500
  - part-time: 2 800 periodic
  - markets at 25-50 = 112,000

1. Plus, cost of proposed twenty Growth Centres, $12,000,000. This investment in rural development strategy to be deferred in favour of more direct investment in rural development - infrastructure, institutions, services and markets.
In Map II a four tier system comprised of 39 sites is illustrated. Figure 1 portrays the evolution of a periodic market site brought into being by the delivery of services for a particular period each week into an increasingly permanent market site with a Regulated Market Society reinvesting its income from rents, levies and profits in the further development of the market and services.

Zimbabwe is busy reinstating and extending the coverage of rural services built up before the disruption of the last few years. The concept of RSCs will help to discipline the siting of services and the housing for service personnel into fewer urban sites with, therefore, greater growth and service potential. The temporal aspect and the more intimate physical character of a periodic sub-system should lead to other equally important efficiencies. For instance, in the few areas where the full physical health care plan is in place, clinics are still 11 kms. or so apart. They serve a population of between 2,000 – 5,000. The clinics are fed by village health workers serving an area with an 8 km. radius and a population of between 200 – 500. That infrastructure can be incorporated into a periodic sub-system with the benefit that on at least one day a week higher level medical personnel would attend clinics in a nearby market place at which large numbers of people from neighbouring villages congregated. Real savings in terms of travel and of accomplishment per visit by personnel and patients can be effected.

The same would hold true for agricultural and veterinary extension, bank, postal, mobile library, adult education and commercial services. At present the ideal, though still a distant hope is that agricultural demonstrators serve, by bicycle, an area not exceeding 10 kms. in radius, or a maximum population of from 5,000 to 12,000, or one staff member for from roughly 1,000 to 2,400 farmers. Congregating farmers at several periodic markets on different days of the week within the area served by one agricultural demonstrator means that he can contact through demonstrations, lectures and films a large number of farmers each week (depending on the seasonal requirements of extension) and that this efficiency can warrant his regular support by specialists and the use of specially prepared media. RSCs, conversely, because they are higher order centres, are suited to occasional, region wide events such as agricultural shows, meetings of the CSO Board and of Master Farmer committees and the like.

Table III illustrates the costs of the altered hierarchy of service centres proposed. While very rough, the table does suggest, that it would be possible, on cost grounds, to achieve a fairly universal coverage in the Tribal Trust Lands for about what it would cost to implement the Whitman proposal. The cost of a rural service centre has been increased 25% to include additional facilities and residences in order to cater to its hinterland of periodic markets. As we shall see, those periodic markets and those rural service centres that institute and operate a Regulated Market Society would be able to finance the development of their market and its related infrastructure. In other words, much of the cost of developing the periodic markets could be financed by means of loans.
Table III also compares the jobs created under the two proposals. The significant difference is in the very large number of part-time jobs provided in the periodic markets. It means that many villagers will gain worker, artisan, manager or specialist status and experience - an investment in the leading edge of development, human capital.

The Working of Periodic Markets:

A periodic market can operate in a clearing, preferably under shade trees. It would normally be situated near a village and adjacent to a cross roads and a bus stop. In Zimbabwe it would almost certainly take place in an existing business, mission or school or in a combination of such sites. The impetus for the institution of periodic markets would have to come from government working with local leaders and institutions. The following list of services that would operate in a developed periodic market illustrates the combination of official, local institutional and commercial elements that would bring its periodicity to life.

Local Institutions - weekly, monthly or seasonal meetings of:
- Community Land Company
- Credit Union
- Regulated Market Society
- Agricultural Co-operative
- Church Committees
- School Committees
- Health Committees

Official Agencies - mobile offices or weekly opening of:
- Post Office
- Primary Health Centre
- Agricultural Extension
- Adult Education (perhaps under Employment Guaranteed Scheme)
- Animal Husbandry, including the management of dip tanks and livestock auctions (these could be administered by the market or a co-operative society).
- Mobile Library

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27. Community Land Company: A concept of communal land ownership which is explained in detail in a forthcoming book by Dr. Reynolds.
Commercial:

Existing store or stores:

Butcher (often open only once or twice a week in a Tribal Trust Land)

Baker (a rural bakery becomes profitable under periodic market systems. It can serve two or three nearby markets from one bakery, i.e. it can operate three to four times a week)

Grinding mill (can be mobile)

Visiting traders

Open vegetable and fruit, second hand and locally fabricated goods market usually manned by petty traders operating in a circuit and by local villagers, mostly women.

Mobile cinema, theatre, other entertainment, some officially sponsored for educational purposes.

Barber

Tailor

Shoe repairer

Potter

Herbalist

It may help to illustrate the working of a periodic market system with an account of the way they operate in West Africa. Periodic markets take place in a 'ring' among a group of villages. The markets are usually over 4 or 8 day periods with the market in one part of the area each day. The distribution of markets is such that every market area, or ring, has four or 8 market meeting places. In West Africa markets take place in easily accessible areas, though they are usually away from any village. This is probably the result of traditional rivalry among the people of the area so that they chose to meet and trade on mutual ground. This fact may also explain the dominance of women in local trade, probably, at least initially, because it avoided the possibility of arguments among men. Each market is usually 11 kms. away from the other and there is usually a higher level town or village at the 'centre of the market area.28 A central village usually has a daily market which buys much of the surplus production from the market area and also supplies local women with goods imported into the area. Women from the central village take the goods to the periodic market and sell them there; often in return for local produce which they then resell at the daily market. Local women often travel to more than one market during the four or eight day period. This is because they often cannot carry all their produce to market (most travel is by foot) and many products are liable to perish if not used within a day or two.

28. Description from Hodder, B.W. and Ukwe, U.I., Markets in West Africa, Ibadan University Press, 1969, pp. 60-65. It is noteworthy that Hodder points to the fact that central place theory is probably not applicable to urban development in Yorubaland, Nigeria.
The periodic markets are highly efficient with most of an area's population participating in the trade. Goods aimed at markets outside the local area are bulked by part-time local traders in touch with intermediaries. Such goods may bypass the periodic market and go straight into the larger central town or village. In other words, the periodic market, once every four or eight days, brings most of the adults of a locality into contact with intermediaries from the larger area. Local produce is traded and if the price is lower than the expected price in other areas (indicating a surplus) the produce is bought in bulk by the intermediaries and sold in other areas. Such 'export' trade provides revenue which can be used to purchase farm inputs and other goods brought into the local area, usually by the same or other intermediaries. The system is both labour intensive and efficient with the government's role kept to a minimum.

It is recommended that in Zimbabwe each periodic market be managed by an elected committee. The committee could receive a small amount of initial support from government in the form of a low interest loan to set out the market, including the provision of pit latrines and drinking water where necessary. The committee should enjoy the equal rights to charge a small fee from those who use the facilities to trade. It should be encouraged to take loans with which to erect covered spaces, storage, a meeting hall and even shops, whatever will encourage the growth of the market and thereby the business turnover and the comfort and effectiveness of social and other services.

The Regulated Market Society

Market committees should be able to register, perhaps with a special registrar, as Regulated Market Societies. A 'regulated' market in this context means a physical market area in which agricultural produce is auctioned. The principle is to open up the selling and buying of agricultural produce, primarily with the major staples, cash crops and livestock within a locally controlled and understood market. Open market mechanisms act to encourage peasant production for the market for the mechanism of sale is verbal and open to checks by neighbours, the elected Market Committee and auditors. It removes producer reliance on traders, including official agents, with whom producers may have other and dependent relations. For instance a trader can play upon the prices he offers for produce in settlement of debt or when he knows that the seller relies upon him for credit in emergencies.

A significant degree of efficiency is effected by the temporal discipline of auctions. Under the trader/agent scheme crop deliveries take place on any day and tend to be in the form of small exchanges for immediate consumption needs. In contrast, a Regulated Market Society would hold a limited number of auctions after harvest time, as decided by the members. The greater volume of deliveries on any one day allows for greater efficiencies in terms of handling, storage and transport. Consequently, as shown below, the Society should be able to translate official prices for produce delivered at depots into a support price offered by the Society, which includes transport on society account, that is appreciably above the price offered by traders/agents.
TABLE 4

Illustrative Table Comparing Efficiencies in Crop Marketing

<table>
<thead>
<tr>
<th>GMB Depot Price</th>
<th>Trader/Agent deductions for:</th>
<th>Regulated Market Society deductions for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>handling 19.4%</td>
<td>levy 8%</td>
</tr>
<tr>
<td></td>
<td>transport 8.3%</td>
<td>transport 6%</td>
</tr>
<tr>
<td></td>
<td>net price 100</td>
<td>net price 100</td>
</tr>
<tr>
<td></td>
<td>-27.7</td>
<td>-14</td>
</tr>
<tr>
<td></td>
<td>official price 72.3</td>
<td>support price 86</td>
</tr>
</tbody>
</table>


2. Hypothetical figures, the levy, at 8% is 2% above the maximum levy on wheat allowed in the Punjab, India. The transport, 6%, reflects expected efficiencies from bulk haulage.

The translation of official depot prices into a support price at auctions conducted by Regulated Market Societies has several benefits. It removes the management of countless petty details from the responsibility of the official agencies. It opens internal, and if so provided, export trade to the private sector who can capture business by bidding above the support price set by each society. It provides a strong economic incentive to co-operative effort which can spread to other agricultural, service and local processing ventures. And it provides a source of local revenue raising which is controlled, set and the uses determined by members. Government, if thought desirable, can encourage local efforts by offers to match funds for particular purposes within laid down time limits. In similar fashion, banks and potential business partners, including CLOs, will invest in Societies whose membership is seen to be taxing itself for a better tomorrow.

A levy on crop sales controlled by members of a Society is attractive on equity, efficiency and management grounds.

The operation of auctions need not preclude the retention of the trader/agent system. Society auctions should largely replace the trader/agent simply because, for at least some crops, it is able to generate efficiencies and group benefits from co-operative endeavours. Another benefit, though one to be more carefully husbanded, is that it helps to move the local economy onto a fuller cash basis.
If that movement is supported by the thrift and especially the loan philosophy of local Credit Unions, then it can promise to help break onerous financial dependent ties. These combinations are becoming increasingly important as the nexus of poverty, unemployment and growing cash needs raises the price of money in the countryside.

In line with the above, Society sponsored storage and Credit Union Loans to help farmers hold grains through periods of low prices post-harvest can mean that farmers do not have to lose considerable margins through distress sales and later re-purchases. It would help to even out local market fluctuations and to ensure that expected future local demand is held in the area; not, as at present, in a central depot.

Within the system of regulated market societies and periodic markets local people are offered a greater variety of seasonal, part-time and specialist roles, within a close ambit. The intimate scale of operation, concentrated both temporarily and spatially, means that the smaller members of local society can exert influence and can participate at the bottom end of a system that links local to regional and national markets. Most of the trade would be locally managed with little initial reliance on external goods and funds. It should be possible for a large variety of local people to utilise small savings as venture capital with which to embark upon new commercial occupations. However petty in the beginning, new occupations can benefit from the scale inherent in the temporal and physical mechanisms of the links between market and service hierarchies.

A properly integrated system of services, markets and local institutions should assist local traders to effect efficiencies of scale, including those attached to part-time or seasonal trade, and to move fairly rapidly from a concern for the pursuit of wider social goals to more narrowly economic ones. Local trade and the specialisation of production and services are more promising components of any strategy of regional development than is the present limited system of official purchase and monopoly removal of the surplus production of regulated crops.

29. In India and in West Africa village women often collect and sell vegetables once or twice a week to a local 'specialist', who bulks village goods into periodic markets. Between 5 am. and 7 am., or within a period of about one hour, village women can dispose of farm produce at points on inter-village paths less than two kins. from home. The person buying the vegetables will take two to four hours to purchases a head load and to dispose of it in the nearby market operating that day. Participation for most women is an extra rather than a competing activity.

30. Recent research indicates that African traders have high levels of economic motivation and ability. See for instance, William C. Jones, 'Measuring the Effectiveness of Agricultural Marketing in Contributing to Economic Development: Some African Examples', Food Research Institute Studies, 9: 175-196, Stanford University.
A combination of the Regulated Market Society and the periodic market system does suggest that it is possible to nurture the growth of regional trade as a primary concern of development. To the degree that regional trade becomes a dominant reality, so it should represent a break in the dependency on the higher-order urban areas that exists at present. With that should flow the beginnings of balanced development of the rural areas. At the same time the Regulated Market Societies and the periodic market system suggest a solution to the inflexibility in terms of both location and function of the rural service centres as proposed. Furthermore, popular participation and local determination are brought in as strong features at the initial stages of post-independent development.