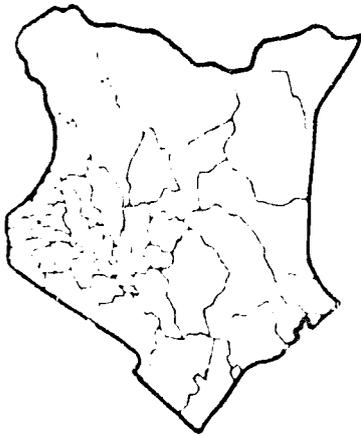
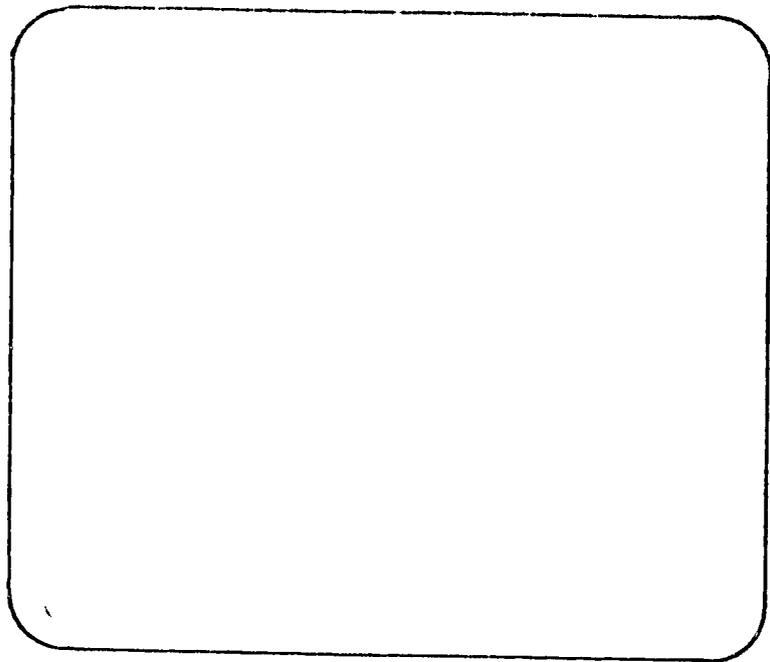


PN-HISE-766

6/1/76



RESOURCE MANAGEMENT FOR RURAL DEVELOPMENT PROJECT



AN EVALUATION OF KENYA'S RURAL
TRADE AND PRODUCTION CENTRE
SELECTION PROCESS AND CRITERIA

Paul J. Smoke

Discussion Paper No. 7

July, 1989

This paper considers the process and criteria used to select districts and urban centres for participation in the Rural Trade and Production Centre (RTPC) Programme, which was launched by the Government of Kenya in support of its rural-urban balance strategy during the 1987/88 financial year. Particular attention is given to the appropriateness of the selection criteria, how well they measure what they are intended to measure, and how they might be improved. This paper takes the objectives of the rural-urban balance strategy and the RTPC programme as given. A separate forthcoming RMRD discussion paper evaluates the rural-urban balance strategy.

Background: Kenya's Rural Trade and Production Centre Programme

The Government of Kenya's rural-urban balance strategy was set forth in Chapter 4 of Sessional Paper No. 1 of 1986. In contrast to earlier regional development strategies, the rural-urban balance strategy calls for the coordination of rural and urban development efforts. It explicitly recognizes the interactive relationship between rural and urban areas, the linkages among different sectors of the national economy, and the Government of Kenya's principal growth priorities.

An important goal of the rural-urban balance strategy is to promote the development of a well-serviced urban system that facilitates the distribution of agricultural production, provides

inputs and support services to both the agricultural and non-agricultural sectors, generates productive non-farm employment in urban centres and rural areas, and increases urbanisation outside of the country's major cities. The success of this strategy will depend to a great extent on government policies aimed at raising agricultural productivity and farm incomes, which are expected to generate increased demand for non-agricultural goods and services produced in the small towns and rural areas.

The first major policy innovation under the rural-urban balance strategy was the establishment of the Rural Trade and Production Centre (RTPC) programme, which concentrates infrastructural development resources in designated small urban centres in rural areas.¹ The new programme funds a set of projects as an RTPC investment package. The rationale for funding packages of investments is that, in order to enhance the productivity of an RTPC and its hinterland, a set of basic interrelated infrastructure projects and services is required. These investments are expected to relieve bottlenecks that impede growth and discourage private investment in the RTPC and its hinterland. Such bottlenecks may include poor farm-to-market roads, a lack of electricity or water, the absence of machinery maintenance services or inadequate facilities for the collection

¹More details on the Rural Trade and Production Centre Programme are found in Sessional Paper No. 1 of 1986, the Government of Kenya's Sixth National Development Plan, 1989-93, Evans (1986), and Gaile (1986).

and marketing of farm produce.

Components of RTPC investment packages may include both physical infrastructure, such as roads and markets, and services, such as credit, training, and cooperative societies, which provide support for farmers, traders and local manufacturers. Funding may also be requested to finance the rehabilitation of existing infrastructure facilities in need of extensive repair to bring them up to full capacity.

Implementation support and funding for RTPC investment packages is being provided by the District Development Fund, which was announced in the Minister for Finance's 1987/88 Budget Speech.² This establishment of this fund was endorsed by the Cabinet in July 1987, and it was gazetted on February 26, 1988. The DDF is working within the District Focus for Rural Development strategy to channel funds from interested aid donors into development projects that meet the objectives of the rural-urban balance strategy.³ The District Development Committees

²The District Development Fund (DDF) was originally started to finance the RTPC programme and the Nyayo Shed programme, which constructs shelters in urban areas for small-scale and informal sector craftsmen. The Nyayo Shed programme was transferred in March 1988 to the Ministry of Technical Training and Applied Technology and a new fund, the Jua Kali Fund, was set up to finance it. It is possible that DDF may have an expanded role and cover a more comprehensive set of rural and urban development programmes and projects in the future. Internal MPND discussions have been held on this issue, but official policy statements have not been released thus far.

³During much of the 1980s, Kenya has been moving towards strengthening the administrative and technical capacity of its districts, the principal administrative subdivisions of the central government. This process has occurred under the District Focus for Rural Development strategy, which was initiated by

have primary responsibility for all DDF projects, which are expected to be coordinated and integrated with other development projects in the districts.

The RTPC Programme is being coordinated by the Rural-Urban Planning Section (RUPS) and District Development Fund Section (DDFS) of the Rural Planning Department (RPD) in the Ministry of Planning and National Development (MPND). RUPS and DDFS work closely with the District Development Committees (DDCs) in establishing RTPC sites and planning investment packages. The MPND has been assisting the districts which are participating in the RTPC programme by providing them with technical criteria and guidelines that will aid them in the selection of their RTPCs and the identification of their project packages. Once the identification step has been completed, funds are allocated for the design and, subsequently, the construction of the RTPC project package.

Identifying Districts and Centres to Participate in the RTPC Programme

After a period of lengthy delays, implementation of the first group of eight Rural Trade and Production Centres (RTPCs) has been progressing, and a second group is being selected during

President Moi in 1983. Popularly known as District Focus, the strategy shifts the principal responsibility for the planning and implementation of decentralized development projects from the ministries to the districts. For more information on the District Focus strategy, refer to the GOK's handbook, District Focus for Rural Development (1987) and Cohen and Hook (1986). An extensive evaluation of this strategy is planned for the 1989/90 financial year.

May-September 1989.⁴ The participating districts and centres are identified in a two-stage process. First, RUPS nominates districts and prepares a short-list of RTPC candidate centres within each nominated district using criteria elaborated in RPD Technical Reports Nos. 1 and 2 of 1987, which respectively deal with district identification and selection of sites within districts.⁵ The criteria laid out in these technical reports will be discussed and evaluated later in this paper. Second, in accordance with the District Focus for Rural Development Strategy, DDCs select one centre from the MPND short list to participate in the RTPC programme. The districts and short lists of RTPC candidate centres for the first two rounds of the programme are presented in Table 1.

At the time the RTPC selection criteria were developed, there was a great deal of pressure being placed on the Rural Planning Department to get the RTPC programme quickly underway.⁶ Some of the criteria and the data used to measure the criteria were, therefore, not as well developed as would have been desirable. These criteria did, however, serve the purpose of

⁴A detailed preliminary evaluation of the implementation of the first round of the RTPC programme is contained in Smoke (1989).

⁵RPD Technical Reports Nos. 3 and 4 of 1987 provide additional details on the criteria for shortlisting RTPC candidate sites within districts and give examples of how the various selection indexes are calculated.

⁶See Smoke (1989) for a discussion of how the RTPC programme was started sooner than expected by its original designers.

TABLE 1
RTPC Districts and Short Lists for
the First Two Rounds of the Programme

First Round

<u>Province</u>	<u>District</u>	<u>Candidate Centres</u>
Central	Kirinyaga	Kutus* Kagumo
Coast	Kwale	Kinango* Lunga-Lunga
Eastern	Kitui	Mwingi* Mutomo Kabati
Northeastern	Mandera	Rhamu* Takaba
Nyanza	Kisii	Suneka* Keroha Nyamira
Rift Valley	Kericho	Bomet Ndanai Kipkelion*
	Elgeyo Marakwet	Tambach Tot . Kapsowar**
Western	Bungoma	Chwele Cheptais Kimilili*

*Centre selected by the District Development Committee as an RTPC.

**Centre not on the MPND short list but selected by the District Development Committee as an RTPC.

TABLE 1 -- continued

Second Round***

<u>Province</u>	<u>District</u>	<u>Centres</u>
Central	Nyandarua	Engineer Ndaragwa Njabiini
Coast	Taita-Taveta	Mwatate Taveta
Eastern	Embu	Runyenjes Kiritiri
Northeastern	Wajir	Habasweini Buna Bute
Nyanza	Siaya	Sigomere Ungunja Yala
	Uasin Gishu	Siaya Marigat Mogotio
	Nandi	Cheptarit Lessos
	Trans-Nzoia	Saboti Kiminini Suwerwa
Western	Kakamega	Mumias Luanda Butere

***As of late July 1989, no DDC among the second-round RTPC districts had made the final selection of a centre to participate in the RTPC programme.

establishing a relatively objective process for nominating the districts and selecting the sites to participate in the RTPC programme. This was in line with the Sessional Paper No. 1 of 1986 goal of ensuring a more efficient allocation of infrastructure development resources. Although the District Development Committees have a major role to play in selecting the sites of the RTPCs in their district, no urban centre is eligible to benefit from DDF Funds if it does not meet the various economic criteria set forth in the RTPC programme guidelines.

During the past two years, most personnel and resources in both RUPS and DDFS have been devoted to getting the implementation of the first group of RTPCs underway. As a result, not much time was devoted to refining and modifying the criteria used to select first-round RTPC districts and sites, despite the fact that the need for refinement was well recognized.⁷ Around March 1989, RUPS came under pressure to begin the process of selecting the second group of RTPCs, and there was not sufficient time available to improve the criteria. Although a few minor modifications have been made, it was decided that the same basic criteria used to select the first group of RTPCs should also be used to select the second group. The Rural-Urban Planning Section (RUPS) finished the process of identifying short lists for the second group of RTPC districts in late July

⁷Various minutes on MPND File No. EPD/AC 9/04 discuss problems with the selection criteria observed by officers working in the field and detail the case for modifying certain criteria.

1989, at which time short lists were forwarded to the DDCs for their consideration.

In future rounds of the programme, there will be more time available for RTPC selection. Both the district selection and urban centre selection criteria need to be reviewed, and some modifications may be justifiable, particularly to the centre selection criteria. The remainder of this paper reviews certain issues regarding the district identification and site selection criteria and makes recommendations for their improvement.

The RTPC District Identification Index

The selection of districts to be funded by the DDF under the RTPC programme is guided by the logic of the RTPC strategy and the goals of Government's rural-urban balance strategy. Initial concentration of DDF funds was intended to be in districts that are underurbanized and are producing or could produce considerable agricultural and livestock surpluses. In accordance with the rural-urban balance strategy, such districts are presumed to have a need for expanding the number and size of small towns to provide better market and employment opportunities.⁸

Data on district urbanisation, savings and agricultural production were collected by RUPS and combined into an RTPC district identification index, which assigns a numerical score

⁸See Gaile (1986) and Smoke (1989) for an elaboration of these issues.

to each district.⁹ Although the index initially developed for RTPC district identification was used to nominate the first two rounds of participating districts, its application was modified by MPED to make the programme more politically acceptable. Rather than selecting the districts scoring highest nationally in the identification index, the highest scoring district in each province was selected for the first round, and the second highest scoring district in each province was selected for the second round.¹⁰ The top two districts from Rift Valley were included in each round because of the size of the province.

The application of the selection criteria on a provincial rather than national basis suggests that an important objective of the RTPC programme--to focus on the national high potential areas where the most significant marketing, production and employment gains could be realized--was in part set aside. A district's potential has been defined as relative to the province in which it is located rather than relative to all districts across the country. This has resulted in the selection of a number of Arid and Semi-Arid Lands (ASAL) districts for inclusion in the early rounds of the programme, including Kwale and Taita-Taveta in Coast Province, Mandera and Wajir in Northeastern Province, and Kitui in Eastern Province. In the long run, all

⁹Details of the RTPC district selection index are provided in RPD Technical Report No. 1 of 1987.

¹⁰Only the seven multiple-district provinces were included in the process. The eighth province, Nairobi, was excluded because it is already highly urbanized and developed. Mombasa District in Coast Province was excluded for the same reason.

districts in Kenya (except Nairobi and Mombasa) are expected to benefit from the programme.

Proponents of the current process point out that the selection of one district from each province improves the nationwide equity of the programme and provides funds for urban infrastructure development to districts which have historically been neglected in this area. Furthermore, it is possible to argue that there are in most districts high potential agricultural or livestock areas where RTPC interventions are likely to stimulate the local economy greatly. While both of these points are certainly true, the programme's designers clearly intended the programme to augment economic efficiency and maximize increases in employment and production, which requires focusing on the districts with the highest potential. Proponents of the original objectives of the RTPC programme would undoubtedly argue that there are other substantial programmes which channel funds to ASAL areas, and that RTPC funds were not intended for these areas. Whichever side is more correct, political realities have dictated that all provinces must be covered under the RTPC programme. This political guideline is applied to most government programmes of significant scope, and it is unlikely that the current rules will be changed.

District Identification Index: Conceptual and Empirical Issues

The district identification index is comprised of three components. The first component measures underurbanisation. it

is simply the negative of the percentage of population in each district living in urban areas (centres with a population greater than 2000) during the 1979 census. This measure gauges the degree to which district residents have access to urban services that help to support dynamic rural-urban economic growth.

The second two components of the index, which are weighted by population, measure surplus agricultural production and the availability of additional district resources for expanding production. One measure used is savings as calculated from the Central Bureau of Statistics (CBS) Rural Household Budget Survey of 1981-82. This is supposed to serve as a proxy for smallholder surplus. The other measure is combined agriculture and livestock sales to marketing boards for 1980-85. Standard scores are calculated for each of the index three components.¹¹ In order to weight agricultural production/surplus and underurbanisation equally, the standard score for the underurbanisation component is multiplied by two. This is then added to the other two components to arrive at the index value for each district. The results of the RTPC district identification process using the original index are presented in Table 2.

A number of problems with the district identification index have been noted by RUPS. First, the index may overemphasize the underurbanisation component by making it count equally with

¹¹ A standard score is defined as: actual variable value for each district less the arithmetic mean of the variable across all districts, normalised on the standard deviation for all observations.

TABLE 2
Original RTTC District Identification Index

<u>District*</u>	<u>Standard Scores**</u>			<u>District ID Index</u>
	<u>Per Capita Savings</u>	<u>Per Capita Agriculture & Livestock</u>	<u>Percent Urbanisation</u>	
Central Province				
Kiambu	-0.37	2.33	-0.02	2.01
Kirinyaga	0.66	1.37	-0.64	3.31
Muranga	-0.58	1.15	-0.76	2.08
Nyandarua	2.28	-0.51	-0.27	2.30
Nyeri	0.39	0.98	0.07	1.24
Coast Province				
Kilifi	-0.94	-0.87	0.27	-2.34
Kwale	0.30	-0.79	-0.61	0.73
Mombasa	-0.94	-0.80	2.34	-6.42
North Taveta	-0.16	-0.88	-0.24	-0.56
Tana River	-0.94	-0.76	-0.10	-1.50
Eastern Province				
Embu	0.49	0.36	-0.18	1.21
Kitui	0.43	-0.87	-0.86	1.28
Machakos	-0.01	-0.56	-0.48	0.39
Meru	0.01	0.10	-0.29	0.68
Nyanza Province				
Kisii	0.20	-0.15	-0.54	1.13
Kisumu	-1.70	-0.09	2.35	-6.49
Siaya	-1.83	-0.92	-0.96	-0.83
South Nyanza	-2.06	-0.66	-0.77	-1.18
Rift Valley Province				
Baringo	0.58	-0.80	0.06	-0.34
Elgeyo Marakwet	-0.10	-0.63	-1.11	1.49
Kericho	1.72	2.62	-0.58	5.50
Laikipia	0.58	-0.60	1.22	-2.46
Nakuru	-0.02	0.20	2.85	-5.54
Nandi	1.88	1.73	-0.94	5.49
Trans Nzoia	0.94	0.50	0.29	0.85
Uasin Gishu	0.50	1.01	1.16	-0.81
West Pokot	-0.10	-0.84	-0.57	0.22

TABLE 2 — continued

<u>District*</u>	<u>Standard Scores</u>			
	<u>Per Capita Savings</u>	<u>Per Capita Agriculture & Livestock</u>	<u>Percent Urbanisation</u>	<u>District ID Index</u>
Western Province				
Bungoma	0.36	-0.34	-0.46	0.96
Busia	-1.10	-0.77	0.34	-2.55
Kakamega	-0.51	-0.54	-0.59	0.13

*The KIPC district identification index was not calculated for the following districts because savings data from the Household Budget Survey and agricultural and livestock sales data from the various marketing boards are not available for them: Isiolo and Marsabit in Eastern Province; Garissa, Wajir and Mandera in Northeastern Province; and Kajiado, Narok, Samburu, and Turkana in Rift Valley Province. In addition, the index was not constructed for Mombasa and Nairobi because they are excluded from participation in the KIPC programme.

**The indexes are calculated from the following variables: Per Capita Savings, from savings data in the rural component of the Central Bureau of Statistics Household Budget Survey of 1981-82; Per Capita Agriculture and Livestock, from sales recorded by marketing boards; and Percent Urbanisation, from the 1979 Census of Population. Standard scores are calculated for each of the variables, and the resulting indexes are aggregated (with the percent urbanisation index doubled) to arrive at the KIPC district identification index. All index components are expressed as standard scores ((actual value for district i - arithmetic mean of values across all districts)/(standard deviation of values across all districts)).

agricultural production/surplus. This has resulted in a situation in which it is possible for a high degree of underurbanisation, which counts positively in the index, to largely offset the effects of very low agricultural production/savings, which counts negatively in the index. If the underurbanisation component of the index had not been doubled, two of the first-round RTPC districts would not have been included until later rounds: Kitui would have been outscored by Embu in Eastern Province, and Trans-Nzoia would have outscored Elgeyo-Marakwet in northern Rift Valley Province. Kitui actually had a high negative score on the production/savings variable, but the fact that it is so highly underurbanised more than offsets this. The scores of two other first-round RTPC districts, Kwale and Elgeyo Marakwet, and one second-round district, Siaya, were also significantly bolstered by their high degree of underurbanisation.

The other side of this problem is that several districts that score very high on agricultural/livestock production are relegated to the lower end of the RTPC district priority list because they have a large urban centre. Examples of this situation include Nyeri, Nakuru, and Uasin Gishu, which respectively have the large towns of Nyeri, Nakuru, and Eldoret within their jurisdictions. Unless all or most of the residents of a high-potential district have good access to the large urban centre that eliminates their district from consideration as an RTPC, it does not seem to be desirable that the district's

eligibility to participate in the RTPC programme should be penalized.

In short, the present district identification index virtually guarantees that a highly underurbanised district will be selected in the early rounds of the RTPC Programme, even if it has very low agricultural and livestock production. Furthermore, the index effectively disqualifies districts with a single large urban centre from early selection, even if they are very productive districts with significant unexploited agricultural and livestock potential. Only two of the first-round RTPC districts (Kirinyaga and Kericho) and two of the second-round districts (Nandi and Nyandarua) score well into the desired ranges on both parts of the index, i.e., relatively low urbanisation and high production/savings.

In addition to the issue of balancing the effects of production/savings and urbanisation, a number of other problems complicate the interpretation of the RTPC district identification index. First, not all districts were included in the Household Budget Survey from which the small-holder savings figures were taken. Certain semi-arid northern and eastern districts, which are in some cases populated largely by nomadic herders, were not covered in the survey, so that their savings figures available for the calculation of the RTPC index are in effect zero. It can be argued that zero may be a nearly appropriate measure of savings in a formal economic sense. Few of the pastoralists in certain ASAL areas are heavily involved in the formal sector,

most are not likely to have much use for significant amounts of Kenyan currency, and a high percentage probably lead a subsistence existence. Nevertheless, there is clearly significant wealth in these areas in the form of livestock, and it is not satisfying to have it entirely excluded from the measure of production/savings.

Even in those districts for which it is available, the savings data extracted from the Household Budget Survey cover only the rural areas, although these rural savings data do include remittances from urban areas. The urban component of the survey was not included in the RTPC index calculation. A recent study of rural-urban dynamics in the Kutus RTPC (Kirinyaga District, Central Province) demonstrated that a significant portion of income generated in the urban areas is invested in productive activities in the rural areas.¹² The existing level of this transfer of funds is accounted for, at least to some extent, by the inclusion of urban remittances in the rural savings data. Additional funds taken from urban savings, however, might be channelled outside of the major urban areas if an economic environment is created in small urban centres such that investors believe it is profitable to invest in them. Thus, the availability of a district surplus for expanding income-generating activities in rural areas and their small urban centres may be somewhat underestimated because the urban component of the Household Budget Survey was not considered.

¹²Bendavid-Val, et. al. (1988).

Another problem with the measure of production/surplus revolves around the use of only centrally marketed agricultural and livestock sales in the calculation of the production component of the data. Sales to marketing boards is certainly a reasonable measure of surplus in a significant number of districts, where it accounts for a majority of the agricultural component of Gross District Product.¹³ The measure, however, does not substantially reflect the value of economic activity in the local agricultural and livestock sectors in some districts. One need only look at the data for Nyanza and Western Provinces, for example, to see that they would appear to be highly unproductive agricultural districts if one relied only on sales information from marketing boards. Some of the most arid districts in Kenya have substantial livestock production, and a few even have some pockets of agricultural production, as MPND officers have seen clearly in the Rhamu RTPC (Mandera District, Northeastern Province).

The use of sales to marketing board data biases the district identification index towards those districts that specialize in the production of major cash crops marketed through the boards. This is clear when one observes that the highest scoring districts by a wide margin in the overall index are major producers of coffee and tea, such as Kericho, Nandi, Kizinyaga,

¹³Agricultural and livestock production sold through the marketing boards in the aggregate generally accounts for more than 80 percent of the agricultural and livestock component of Gross National Product.

Muranga, Kiambu, Nyeri, etc. Only a few outsiders break into the top of the lineup (e.g., Kitui and Ilgeyo Marakwet) because of their unusually high degree of underurbanisation. Furthermore, a significant percentage of centrally marketed agricultural output is produced by small holders in some districts, leading to an element of double-counting in the overall measure of production/savings. Finally, the marketing organizations rarely do business in some of the northern and eastern ASAL districts.¹⁴ There is little agriculture in much of these semi-arid areas, so that the agricultural marketing groups have no occasion to do business here. Livestock-related organizations, such as the Kenya Cooperative Creameries and the Kenya Meat Commission, also do not have much to do with these districts, parts of which are high-potential livestock areas.¹⁵

The final issue to be raised about the district selection index is its focus on agricultural/livestock production, rather than unexploited potential. By concentrating on the former, RUPS may be, at least to some extent, targeting areas to participate in the RTPC programme that are already practicing relatively more productive husbandry techniques and producing at levels closer to their capacity. The logic of the rural-urban balance strategy

¹⁴The district identification index was not calculated for those districts for which no savings data from the Household Budget Survey and no data on sales to the marketing boards exist.

¹⁵Livestock from distant districts is sometimes moved before sale to the Kenya Meat Commission. These sales are not credited to the district from which the livestock originated, but rather to the district where the sale took place.

suggests that more emphasis should be placed on stimulating the areas that have high agricultural potential, but have lower yields and less productive crop mixes. The most significant production and employment gains might be expected in such areas.

It should be noted that the need to select one district from each province and some of the biases generated by the current index have, at least to some extent, offset some of the district identification problems discussed above. For example, some ASAL districts with good livestock potential, such as Kwale and Mandera, are being included in the programme despite their low RTPC district indexes relative to those districts scoring highest nationally. In addition, several high potential/low productivity districts, such as Kisii and Elgeyo Marakwet, are also being given the opportunity to participate in the programme.

Refining the RTPC District Identification Index

Given the above problems with the RTPC district identification index, RUPS was faced with the issue of whether and how to improve it for future rounds of the programme. The immediate concern during the 1988-89 financial year was how to revise this index for the second round of RTPCs. The obvious option was simply to use the existing index. Given time and data constraints, this was not considered to be an entirely unreasonable way to proceed, despite the obvious problems with the index. It was decided, however, that even if RUPS continued to use the existing index, it would be appropriate to consider

eliminating the step of doubling the underurbanisation component. This component may be seen as less important than agricultural and livestock production/potential because it is possible to justify the need for additional effective market centres even in most districts where a major urban centre already exists.

The other option was to make one or more significant modifications in the district identification index. Three possibilities were considered. First, including a measure of urban savings in the districts would improve the degree to which district surplus funds available for development were explicitly considered. If the urban savings data used are net of remittances to rural areas, the problem of double-counting would be minimized. Unfortunately, it was discovered that district savings data from the urban portion of the CBS Household Budget Survey of 1981-82 would not be available in sufficient time to be of use for selecting the second group of RTPC districts.

Second, one major concern with the original index was that it looked only at agricultural sales to marketing boards, and not total agricultural production. RUPS officers collected data from the Ministry of Agriculture and the Ministry of Livestock Development on total agricultural and livestock production for a sample province (Nyanza) to discern their reliability and their impact on the district prioritisation within provinces.¹⁶ It was

¹⁶There are conflicting reports about district-level agricultural and livestock production data, ranging from opinions claiming their general acceptability to opinions condemning them

reluctantly decided that these data could not be used for the second round of RTPC selection. Although it was clear that the use of these data could affect the prioritisation of districts within certain provinces, there are some problems with the data which require a major effort to clean up. Furthermore, the process of collecting and analyzing the data for all provinces would have been too time-consuming given limited staff and the need to proceed as rapidly as possible with the second group of RTPCs.

A further refinement considered by RUPS was to use the Farm Management Handbook to estimate potential agricultural production for each district. By comparing this to existing production, it would have been possible to get a better sense of unexploited potential. There were concerns among RUPS officers, however, that the decisions made regarding the optimal mix of crops might be open to question. It was decided that, at least for the second round of RTPCs, this exercise would be unjustifiably time consuming, and that it may not sufficiently affect district prioritisation within provinces to be worthwhile.

Selection of the Second Round of RTPC Districts

Because of the staff, time, data, and resource limitations discussed above, it was decided essentially to use the original RTPC district identification index for the second round of RTPCs.

as useless or fictional. This issue requires further exploration before a decision can be reached about whether to use the data.

Using the sales to marketing boards and small-holder surplus data used for the first round as the surplus component of the district selection index was not expected to pose serious problems, except for the exclusion of several districts for which the relevant data do not exist. The value of cash crops marketed through boards, such as coffee and tea, is so high relative to the value of other crops that the districts which produce cash crops would continue to come out on top of the priority list even if agricultural production sold independently of marketing boards were included. The use of total agricultural and livestock production data, however, is expected to allow RUPS eventually to consider all districts and to change the district RTPC priority ranking within a few provinces, particularly across districts where cash crops are not widely grown. Thus, it was decided to continue to work on collecting and, where possible, improving the total agricultural and livestock production data for use in subsequent rounds of RTPC district selection.

Questions remained among MPND officers regarding the doubling of the underurbanisation component of the original district identification index, and there were suggestions that this measure did not fully capture the degree of underurbanisation. Some changes were made in the index calculations to see how sensitive the index results are to alternative measures of underurbanisation/service accessibility.

RUPS experimented with six variations on the district identification index used to select the first group of RTPCs.

Each of these alternative indexes had two components: 1) the sales to marketing boards/small-holder surplus component; and 2) a component related to urbanisation/adequacy of access to urban services. As with the original index, each component is expressed as a standard score.¹⁷ All of the components are fairly crude, and there are clearly identifiable problems with each; nevertheless, the variations provide some basis on which to understand the extent of the measurement and interpretation problems being dealt with.¹⁸ The six types of component 2 are as follows:

1) The same underurbanisation component used in the first-round district identification exercise, but without doubling: This component, which is the negative of the percentage of urbanised population, gives a sense of the degree of underurbanisation in the district. Counting this component only once changes the ETC priority listing of districts within several provinces compared to the doubled index used in the first round.

2) Population: The idea here is that virtually all districts in Kenya are underurbanised and that it might be desirable to aim at urbanising the high population districts first, even if they already have one or more viable urban centres.

3) Population Density: The notion here is that the more densely populated districts should receive primary attention because they require the greatest concentration of service provision capacity.

¹⁷This is defined as: (actual value for district i - arithmetic mean of values across all districts)/(standard deviation of values across all districts).

¹⁸What is missing from all of the alternative measures is a clear indication of how population and density vary within each district. This information is necessary to be able to make better judgements about whether the population of particular districts lacks access to urban centres.

4) Population Per Urban Area (defined as: district population/number of urban areas with a population greater than 2,000): This measure crudely suggests the number of people being served per urban area in the district. The higher the number, the greater the presumed need for additional viable urban centres.¹⁹

5) Population Per Adjusted Urban Area: This is calculated as in (4), but the urban areas are weighted by size. The larger urban areas are weighted more heavily on the presumption that they serve a larger hinterland. Again, the idea is that the more people being served per urban area, the greater the need for building up additional urban centres.

6) Density/Urban Area: This variable looks at the population density of a district relative to the number of urban areas available to serve the district. The higher the value of this variable (i.e., the greater the density relative to the number of urban areas), the greater may be the need for additional urban centres.

These variations on the urbanisation/service accessibility component of the RTPC district selection index sometimes yield different results, but in most provinces, the same districts come out as the top several priorities. This suggested that RUPS officers would be able to choose the second round of RTPC districts knowing that they could, in most cases, easily justify their selection. In a few cases, the use of the different components does greatly shift priority districts within provinces. A summary of the selection process for each province follows, taking into account the various effects of using alternative measures of underurbanisation/service accessibility. The full results are presented in Table 3.

¹⁹The population figure of 2,000 is used because it is the Government of Kenya's official definition of an urban area.

TABLE 3
Alternative RITC District Identification Indexes

<u>District*</u>	<u>Standard Scores**</u>					
	<u>Alt1</u>	<u>Alt2</u>	<u>Alt3</u>	<u>Alt4</u>	<u>Alt5</u>	<u>Alt6</u>
Central Province						
Kiambu	1.98	1.83	3.22	3.95	2.27	1.93
Kirinyaga	2.67	1.39	1.72	3.10	2.26	1.95
Muranga	1.33	1.43	1.70	2.38	1.75	2.95
Nyandarua	2.03	1.94	1.23	1.46	1.96	1.86
Nyeri	1.31	1.14	1.79	1.91	1.36	1.14
Coast Province						
Kilifi	-2.08	-2.37	-1.56	-2.41	-2.38	-2.23
Kwale	0.12	-0.82	-0.72	-1.09	-0.95	-0.06
Lamu	-4.07	-2.80	-2.91	-2.61	-2.36	-2.61
Tanga-Taveta	-0.89	-1.38	-1.88	-1.91	-1.61	-1.36
Tana River	-1.60	-2.24	-2.66	-2.63	-2.35	-1.62
Eastern Province						
Embu	1.03	1.33	0.50	0.92	1.56	1.20
Kitui	0.42	-0.25	-0.11	-1.24	-1.02	0.85
Machakos	-0.09	-0.16	1.98	-0.77	-1.00	0.17
Meru	0.40	1.47	1.84	0.01	0.00	0.76
Nyanza Province						
Kisii	0.59	3.97	1.76	2.94	4.56	1.11
Kisumu	-4.14	-1.66	-1.53	-0.61	-1.03	-2.35
Siaya	-1.80	-1.25	-2.49	-1.94	-1.04	0.70
South Nyanza	-1.95	-2.38	-1.28	-2.33	-2.80	-1.84
Rift Valley Province						
Baringo	-0.28	-1.15	-0.88	-0.98	-0.84	-0.79
Elgeyo Marakwet	0.39	-1.24	-1.67	-1.17	-0.72	-0.61
Kericho	4.93	4.39	5.27	4.99	4.38	4.86
Laikipia	-1.24	-0.17	-0.74	-0.80	-0.46	-0.63
Nakuru	-2.68	-0.42	1.12	0.31	-0.27	-0.49
Nandi	4.55	4.29	3.38	3.79	4.46	5.69
Trans Nzoia	1.15	2.33	1.34	2.16	3.02	2.13
Uasin Gishu	0.35	2.32	1.36	1.54	2.16	1.29
West Pokot	-0.36	-1.54	-1.56	-1.67	-1.47	-0.97

TABLE 3 — continued

<u>District*</u>	<u>Standard Scores</u>					
	<u>Alt1</u>	<u>Alt2</u>	<u>Alt3</u>	<u>Alt4</u>	<u>Alt5</u>	<u>Alt6</u>
Western Province						
Bungoma	0.49	-0.12	0.61	0.81	0.12	0.31
Busia	-2.20	-1.14	-2.07	-0.85	0.11	-2.12
Kakamega	-0.45	0.83	1.30	0.91	0.24	-0.06

*The alternative RTPC district identification indexes were not calculated for the following districts because savings data from the Household Budget Survey and agricultural and livestock sales data from the various marketing boards are not available for them: Isiolo and Marsabit in Eastern Province; Garissa, Wajir and Mandera in Northeastern Province; and Kajiado, Narok, Samburu, and Turkana in Rift Valley Province. In addition, the index was not constructed for Mombasa and Nairobi because they are excluded from participation in the RTPC programme due to their high degree of urbanisation.

**The six alternative indexes each have two components: 1) the sales to marketing boards/small-holder surplus component; and 2) a component related to urbanisation/adequacy of access to urban services. The latter component is measured for Alt1 through Alt6 by six different measures: 1) The same underurbanisation component used in the original index (see Table 2), but without doubling; 2) population per urban area (defined as: district population/number of urban areas with a population greater than 2000); 3) population; 4) population density; 5) density/urban area; and, 6) population per adjusted urban area (this is calculated as in (2), but the urban areas are weighted by size, with larger urban areas weighted more heavily on the presumption that they serve a larger hinterland). The justification for looking at each of these alternatives is found in the text of this paper. All index components are expressed as standard scores ((actual value for district i - arithmetic mean of values across all districts)/(standard deviation of values across all districts)).

Central Province

The Central Province RTPC district rankings are highly sensitive to the alternative definitions of the urbanisation/service accessibility component of the district selection index. A different prioritisation results from each of the alternatives. The size and density of population in Kiambu and Kirinyaga Districts favors them when using alternatives which incorporate those variables. On the other hand, Nyandarua is by far the most highly underurbanised district in the Province, both in terms of number of urban areas and percentage of population living in urban areas. Furthermore, the small-holder surplus is very high in Nyandarua, suggesting significant unrealized potential, most likely in livestock production. Both the original district selection index and two of the six alternative formulations place Nyandarua first or second on the priority list. Given how well it fits in with the goals of the RTPC programme, it was recommended that Nyandarua be the Central Province district for the second round of the RTPC programme.

Coast Province

Kwale district, which is in the first group of RTPC districts, is ranked number one by all variations of the RTPC district selection index, largely because of its underurbanisation and relatively high level of per capita savings. Taita-Taveta district receives the second highest score in the original index and five of the six alternative indexes.

Certain districts, such as Kilifi, have high populations and unexploited potential, but have a larger number of urban centres and/or a higher percent of their population living in urban areas, which reduces their standing in the indexes. Although arguments could be made for other districts, it was deemed reasonable to nominate Taita-Taveta as the second-round RTPC district in Coast Province.

Eastern Province

Kitui District, the current RTPC district in Eastern Province, scores low on all alternative indexes except the first one. As suggested earlier, Kitui was selected only because its high degree of underurbanisation overwhelmed its lack of agricultural productivity in the original index. Embu District scores second in the original index and one of the alternative formulations and first in four of the alternative formulations. This district is underurbanized and has significant agricultural potential. It was deemed easily justifiable to nominate Embu as the second-round Eastern Province RTPC district.

Northeastern Province

Some of the key data required to construct the RTPC district selection indexes for Northeastern Province are not available, so that the indexes are not very useful in this case. Even where alternative indexes could be constructed, it is not clear that they are very meaningful without some formal measure of

production or surplus. These are not agricultural districts, and most of the livestock is produced by nomadic pastoralists. In most cases, the rankings from available data for the three Northeastern districts are clustered closely together. Mandera is the first-round RTPC district in Northeastern Province, and it seems to have been selected arbitrarily. It did not seem to make too much difference whether the next district selected was Wajir or Garissa. Wajir was considered to be a more easily defensible choice because its greater remoteness means that it is generally more neglected by donors than Garissa and that its few towns are generally less developed.

Nyanza Province

Lisii District, which is developing a first-round RTPC in Suneka, ranks number one in the priority listings generated by the original RTPC district selection index and all six of its alternative formulations. The district order of priority, however, is much less clear beyond this point. Siaya scores second in the original index and three of the six alternative formulations, largely because of its high degree of underurbanisation. With respect to the current agricultural sales to marketing boards, it is fairly comparable to Kisumu and South Nyanza. If, however, one were to look at the total agricultural and livestock production data that RUPS is not using because of an inability to produce it quickly and accurately for

all provinces, South Nyanza significantly outscores Siaya.²⁰ One might also argue that Siaya District is the beneficiary of substantial project funding from IFAD, while South Nyanza is not receiving such significant donor funds.

These issues made RUPS officers somewhat uncomfortable with Siaya being chosen above South Nyanza, given the latter's clearly greater agricultural productivity. On the other hand, there was concern that if certain data were used as part of the decision-making process for one province and not for others, and if RUPS officers begin making judgements that cannot be justified on the basis of the standard index they are trying to institutionalize, RTPC would be open to criticism, and attempts to be as "objective" as possible and to avoid decisions based largely on political considerations might be undermined. It was thus decided to follow the index results and select Siaya as the second-round RTPC district in Nyanza Province. One could argue that the district not selected this year will be selected next year, and that it doesn't really make much difference which one was chosen.

Rift Valley Province

Because of the size and diverse agroecological composition of Rift Valley Province, it would be useful to apply a much more highly refined index in future rounds of RTPC district selection

²⁰In 1985, the value of per capita total agricultural and livestock production was estimated to be Ksh. 901 in South Nyanza versus Ksh. 719 in Siaya.

to avoid arbitrary results. It was, however, quite easy to justify the selection of Nandi and Trans-Nzoia Districts as the two second-round RTPC districts from Rift Valley Province. They consistently score well above their nearest competitors in both the original index and all six alternative formulations of it because of their high economic potential and significant underurbanisation. The prioritisation list, however, varies significantly across alternative formulations in its lower range. Thus, it is imperative that RUPS collect agricultural and livestock production data for future rounds of the district selection process in this province.

Western Province

The first-round RTPC district in Western Province is Bungoma, which scores first in the original index and two of the alternative formulations. Kakamega scores second in the original index and two of the alternative formulations, and first in four of the alternative formulations. The only other district in the province is Busia, which is both highly urbanised and scores poorly on the production/savings component of the index. Thus, it was not difficult to justify Kakamega as the second-round RTPC district for Western Province.

The Future of the RTPC District Identification Index

It is clear from the preceding discussion that the identification of districts to participate in the RTPC programme

can be a confusing exercise given the unavailability of adequate data to measure what should ideally be measured. Given data and resource constraints, it is not going to be possible to construct a high quality index that unambiguously identifies the best possible prioritisation of districts for inclusion in the RTPC programme. One might even argue that, as selection begins on the third round of RTPCs, most districts in the country will have benefitted from RTPC funds within a few more years. This suggests that it is not worthwhile to invest a great deal of time and effort in improving the district identification index, and that efforts should instead be concentrated on selecting urban centres where RTPC interventions are likely to be most effective and designing better RTPC investment packages. While this is true, it is possible to improve the district identification index without undue effort, and this task will also serve the purpose of collecting certain district-level data that MPND will find useful for other planning purposes.

The urban component of the Household Budget Survey of 1981-82 is expected to be out in time to include urban savings data in the measure of district surplus for the third round of RTPCs. As argued earlier, if RTPCs make the investment climate in certain areas of the district particularly attractive, additional urban savings may be drawn away from alternative investments in larger urban centres. These savings data would certainly be worth collecting and incorporating into the index.

It would also be appropriate to continue collecting and

improving district-level agricultural and livestock production data, an exercise currently being pursued by the District Support Section (DSS) of RPD as part of the broader task of compiling a district-level database for use in future district planning efforts. Even if these total production data are used to replace the marketing board data in the RTPC district identification index, the major cash-crop-producing districts will continue to come out on top nationally. However, it seems very likely that use of the more comprehensive data could change in some provinces the relative rankings of districts, raising the score of those that are oriented towards the production of locally marketed food crops.

More consideration should be given to the issue of the importance of actual production versus unexploited potential in nominating districts to participate in the RTPC programme. If total agricultural production data are compiled for use in future rounds of the index and sufficient manpower can be tapped in RPD, it may be worth using the data contained in the Farm Management Handbook to identify those districts where there is significant unexploited potential. As noted earlier, however, it is not clear that the optimal mix of crops reflected in the handbook data are unambiguously superior to other possible production mixes.

An additional consideration for district selection, even if less formally applied than the data incorporated into the district identification index, is the viability of local

authorities that are likely to have a role to play in the success of the RTPC programme. After construction, many types of RTPC projects are expected to be taken over by local authorities, generally county councils, which would be responsible for operating the facilities and meeting recurrent costs. Poor management and a lack of resources to operate completed development projects have historically been significant problems in Kenya. Although local authority viability need not figure into the index in a major way, it would seem reasonable that, all other things being equal, those districts having local authorities capable of effectively managing completed RTPC projects should be given preference. A simple index could be constructed consisting of information on the local authority's budget surplus/deficit, overall debt position, and degree of success with profitably running fee-for-service activities.

A new census of population is to be conducted in Kenya in August 1989. It would be interesting to use the data collected in this census to calculate new urbanisation indexes for the RTPC district identification process. Although these data may become available too late to be of much help in selecting districts, they will shed some light on decisions made using the 1979 population data and will certainly be useful in selecting future centres to benefit from RTPC investments.

A final issue regarding district identification for the RTPC programme is how the programme will proceed after some provinces have an RTPC in each district while others do not.

Several provinces, such as Northeastern, Western, and Nyanza, have only three or four districts within their jurisdiction, while Rift Valley has thirteen. Even given the fact that two districts per year are being taken from Rift Valley, all districts in the smaller provinces will have benefitted from the RTPC programme by the third or fourth round, while Rift Valley and several other provinces will have a number of districts yet to benefit. MPND must decide if some districts in the smaller provinces will be allowed to have second RTPCs before certain districts in the larger provinces have had any.

Selection Criteria for RTPC Sites Within Districts

As was the case with the RTPC district identification index, the criteria used to select a short list of candidate centres in each district had to be developed very rapidly when the programme was suddenly announced in 1987. Consultation with RUPS staff on relevant policy considerations and discussions with DDFS staff about problems they have encountered in the field with first-round RTPCs suggest some issues to consider regarding revision of the criteria for RTPC site selection.

Although RUPS and DDFS have long had a number of recommendations about RTPC site selection criteria, there was not sufficient time for most of these recommendations to be acted upon for identifying RTPC candidates in the second group of districts participating in the programme. As noted earlier, during the past two years, RUPS and DDFS have been preoccupied

with implementation issues and did not allocate enough time to revise the selection criteria to the extent that would have been desirable. Thus, for the most part, the RTPC site selection criteria that were used for the first round have also been used for the second round. There are, however, some revisions that could be incorporated into the process for future rounds of the programme. These require further consideration.

Revision of Original RTPC Site Selection Criteria

This section reviews the original RTPC site selection criteria and sets forth recommendations for how each criterion might be revised for future rounds of the RTPC programme.²¹ The suggested criteria modifications need not necessarily be adopted, but the sensitivity of the overall index to using them could be tested without significant effort provided that the required data are collected.

Size of Centre/Number of RTPC Candidates Per District

The size of centre issue has been a contentious one for the RTPC Programme, particularly because USAID, the initial donor to DDF, was critical of the exclusive focus on towns with a population of less than 5,000.²² Representatives of USAID have

²¹Details of the RTPC site selection criteria are provided in RPD Technical Report No. 2 of 1987, and examples of their application to specific districts are presented in RPD Technical Reports Nos. 3 and 4 of 1987.

²²Sessional Paper No. 1 of 1986 also suggests a minimum population limit of 2,000 for RTPCs. There were only 45 centres

argued that the potential for job creation is greater in larger towns, and that, at the very least, different size towns should be experimented with instead of focusing only on very small towns.

In spite of the criticisms, MPND--for several reasons--intends to maintain the current size-of-centre criterion, at least for the time being. First, although the proposition that larger towns have greater employment creation potential may be true, there are other programmes which currently deal with or propose to deal with infrastructural development in larger towns. The proposed USAID Kenya Marketing Development Programme (KMDP), which has some of the same rural-urban balance objectives of the RTPC Programme, is likely to focus on larger towns if an urban infrastructure component is introduced at some point in the future. The First, Second, and Third World Bank-Financed Urban Projects and the USAID/RHUDO-Financed Small Towns Development Programme have also focused on larger cities and towns, and followup projects are likely to do so as well.

Second, one important purpose of the RTPC programme is to create viable urban centres in underurbanized districts. Some

of this size reported in the 1979 Census, leaving many districts without a single eligible RTPC candidate and other districts with as many as five candidates. For this reason and because RUPS officers noted during their fieldwork that many centres with a population of less than 2,000 are economically active and growing, the minimum population requirement was dropped. RTPC eligibility is instead based on district assessment of a reasonable minimum size. It should also be noted that district headquarters, regardless of population, are excluded from consideration for RTPC funding.

districts or parts of districts have few or no active urban centres of even moderate size, and MPND believes that it should be trying to create urban centres and stimulate their growth in these areas. This requires focusing on smaller towns, and there have historically been no programmes that do so.

Third, the candidate town populations used in the RTPC selection process are those reported in the 1979 Census, so that the RTPC programme is really getting a broader spectrum of small towns than it might appear at first glance. Those towns which had a population of 2,000 in 1979 may now have a population of only 4,000 or 5,000, but towns which had a population of nearly 5,000 in 1979 may now have a population of 8,000, 10,000, or even more.

With respect to the number of RTPC centres considered during RUPS fieldwork in a particular district, RUPS intends to keep the original methodology, which relates the number of centres considered to the population of a district.²³ The identification of centres to be considered for the RTPC short list, however, must be done more carefully as RUPS officers conduct the fieldwork for future rounds of the programme. During the first round of RTPC site selection, RUPS ran into a number of problems because important economic centres, such as Kapsowar in Elgeyo

²³The number of centres considered as possible RTPCs in a given district is determined by the population of that district as reported in the 1979 Census divided by 40,000 and rounded down. The figure of 40,000 represents the estimated base population to be served by a small town. A minimum of four centres are considered in each participating district.

Marakwet District, were excluded from consideration as RTPC candidates.

Size of Market Area

RUPS plans to continue using the Thiessen polygon method as a first step in identifying the market area of RTPCs, as modified by taking into account geographical barriers.²⁴ However, RUPS must make greater efforts to discuss the issue of market area with local officials when fieldwork is being conducted. In the first round of RTPCs, RUPS relied almost exclusively on the Thiessen polygons and did not take sufficient advantage of being in the field to get local input on this issue. As a result, some market areas were misjudged, including one case in which the eventual RTPC in a particular district (Kapsowar in Elgeyo Marakwet) was actually included in the hinterland of a much less economically active urban centre. Over the longer term, some

²⁴The boundaries of a particular market area are ideally defined by distance to the market centre, by physically and socially constrained boundaries, and by the location of competing market centres. Thiessen polygons are defined such that all spaces within a given polygon are nearer to the centre of that polygon than to any other centre, and they are drawn on maps in such a way that their physical centres represent RTPC candidate towns. Thiessen polygons assume an isotropic (featureless) plain, so that their boundaries must be adjusted to reflect transportation routes; physical barriers to movement such as rough terrain and bodies of water; the proximity of candidate centres to administrative (district) boundaries; and, social barriers such as ethnic composition, to the extent that such barriers are likely to affect trading patterns. After the market area boundaries are drawn, disaggregate census data are used to assign a population estimate to the market area of each RTPC candidate.

type of small-scale market survey of buyers and sellers would help RUPS to understand better where buyers and sellers originate from and how often they come to the RTPC market. This might be developed as a followup to the survey instruments tested in the 1988 study of rural-urban exchange in the Kutus RTPC (Kirinyaga District, Central Province).²⁵

Agricultural and Livestock Productivity of the Market Area

This criterion requires refinement, but it is not clear that the data needed to modify it will be available at any time in the near future. The current criterion is based on a survey of district officials (the DDO, the DAO, and the County Clerk), who are asked to do an ordinal ranking of agricultural productivity in particular parts of a district relative to average per capita productivity in the entire district. Unfortunately, there are no readily available agricultural and livestock production data that are disaggregated by location within districts. Thus, even if RPD succeeds in putting together a database on district agricultural and livestock production, there may not be hard information about the distribution of productive activity across the district. This is an issue that might be raised with the Ministry of Agriculture and the Ministry of Livestock Development, with the hope that more highly disaggregated data

²⁵This study (Bendavid-Val, et. al., 1988) conducted several types of surveys in a first-round RTPC and its hinterland. Plans are underway to streamline the methodology used and to collect data that will help MPND identify better RTPC sites and investment packages in the future.

will be made available at some time in the future.

Alternatively, the use of consultants to assemble such data might be considered.

Agricultural Potential of the Market Area

This criterion is calculated from the Farm Management Handbook, which provides data on optimal agricultural yields for 32 districts. The most recent available national average price data by crop are used to value the optimal yields and thus put agricultural potential in monetary terms. There may be questions regarding the optimal mix of crops used in the Handbook, but these are the best data available and they at least provide some tangible measure of potential for purposes of comparison. The only suggestion for improving this criterion at the present time is that, during their fieldwork to shortlist the RTPC candidates, RUPS officers should collect local price information. Prices for some crops can vary widely across and even within districts, so that more highly disaggregated price data would yield more accurate figures on the value of potential agricultural yields in RTPC candidate areas.

Proximity of Competing Market Centres

Although the method by which market areas are defined should ensure that RTPC candidates have a clear and unique market area, there may be cases in which an RTPC candidate is close to a competing market centre. The objective of the RTPC Programme is

to provide well-serviced urban centres where none exist, not to compete with other viable market centres. Thus, the rule on competing market centres is that, in cases where two candidate centres receive approximately the same rating in the RTPC index, that centre which is furthest away from a competing centre will receive priority. There is general agreement in RUPS that this is a sensible rule, and there are no recommendations for changing it.

Current Levels of Infrastructure in the Market Centre and Its Market Area

Infrastructure is a key link between urban centres and their rural hinterlands, so that an adequate level of infrastructure is essential to meet the goals of rural-urban balance. The urban infrastructure component of this criterion is based on a list of infrastructure facilities, the existence of which scores points for an RTPC candidate. Certain types of essential infrastructure, such as electricity and water, are assigned higher point values than less important facilities, such as busparks and slaughterhouses.

Because the RTPC programme is supposed to place priority on those urban centres where only a few key infrastructure facilities are missing, the index calculated from the total urban infrastructure score favors urban centres that score in the intermediate range, rather than those that have all or little basic infrastructure. The urban infrastructure index also takes account of some types of non-physical infrastructure important

for economic growth, such as credit institutions and cooperative societies.

It is difficult to raise objections to this urban infrastructure index in principle, but it has not worked out so well in practice. Many of the RTPCs selected in the first round had little infrastructure, and, as a result, needed project packages which far exceeded the budget for a single RTPC. This may have happened because other components of the overall RTPC site selection index overwhelmed this particular component, rather than because the criterion itself is poorly formulated. It is also possible, however, that the failure of the index to account for the adequacy of coverage and the current condition of infrastructure leads to undesirable results. For example, if there is a functioning water supply or cooperative society in an RTPC candidate town, the full allocation of designated points are added to the RTPC candidate's score. There are cases of RTPC candidates in which a water supply or cooperative society exists, but serves only a small percentage of the need and/or does not always function properly.

In spite of this, such an RTPC candidate has to date been assigned the full allocation of points simply for having a water system. RUPS should, therefore, consider methods of weighting the score assigned on the basis of the adequacy of coverage and reliability of operation of any type of infrastructure or service included in the index. As future groups of RTPCs are selected, RUPS can, at a minimum, experiment with a weighting system to see

how sensitive the ranking of RTPC candidate sites is to this type of manipulation of the index. The District Infrastructure Inventories currently being finalised by RFD may provide useful data on the condition and utilisation of infrastructure in RTPC candidate towns.

Finding that many of the first-round RTPCs lack significant basic infrastructure may, of course, reflect a situation in which most urban centres that are otherwise eligible as RTPC candidates lack most important infrastructure. If so, then a major implementation problem exists. Options for dealing with this situation would include raising the maximum level of funding available for each RTPC either by reducing the number of RTPCs funded at existing funding levels or increasing the pool of donor funds; and, looking for alternative sources to fund portions of RTPC investment packages.²⁶ The latter option has been pursued in Kinango (Kwale District, Coast Province), a first-round RTPC in which SIDA is providing a significant portion of the funding for an augmentation of the town water supply planned under the RTPC programme.

The rural infrastructure component of this criterion is based exclusively on the mileage of all roads in the market area of an RTPC candidate town relative to the size of the market area. Although one could argue that roads are not the only important type of rural infrastructure, they are the key type

²⁶These various options and their merits and disadvantages are discussed in Smoke (1989).

(along with bridges) that link an urban centre to its agricultural hinterland. Other types of rural infrastructure that affect economic productivity, such as water supplies, are already in the realm of other MPND development programmes, such as the Rural Development Fund and the EEC Microprojects. Thus, the only suggestion for improving this criterion is that the road mileage be calculated from the most recent district transportation maps available, which was not always the case for the first and second rounds of the RTPC programme.

Current Levels of Economic Activity in the Market Centre and Its Market Area

This is perhaps the crudest and most controversial of all of the original RTPC site selection criteria. The "Economic Activity Metric Index" is calculated simply by pacing off the frontage metres of open businesses (formal and informal sector) in an RTPC candidate town. The ideal, of course, would be to conduct a survey of local businesses in order to get data on employees, sales, etc. In the short term, RUPS does not have the time or capacity to do this, although it might be developed as part of the research efforts that are being planned to follow the above-mentioned rural-urban dynamics study in Kutus.

For future rounds of RTPCs, the following improvements to this index are recommended at a minimum. First, sufficient field time should be planned to enable the collection of data on open businesses on a market as well as a non-market day, so that it is possible to construct an overall index based on the number of

market days per week and the difference in metres of open businesses between market and non-market days. Second, an attempt should be made to estimate the number of people at the market on market versus non-market days, and the number of market days per week should be explicitly considered. Third, RUPS should experiment with a system of weights for different types of businesses, such as retail, wholesale, offices, lodgings, bars, production, etc. In some small centres, a significant portion of businesses seem to be bars and restaurants, which should presumably count for less in the index than trading and manufacturing activities.

Although the suggested measures are still crude, these modest improvements are probably the best that can be done in the short run. It would also be useful, however, to look into the possibility of obtaining other data that help to measure economic activity in RTPC candidate centres, such as real estate values, local authority market revenues, and business and trading licenses issued by local authorities.

District Priorities

In accordance with the District Focus for Rural Development, the District Development Committees have the final say in selecting RTPC sites and prioritising RTPC project packages. If, however, the DDC selects an RTPC that was not on the short list of towns generated by the other criteria above, they must be able to justify to the satisfaction of RUPS and DDFS officers that

their choice is consistent with the objectives and guidelines of the RTPC Programme. A town should not be designated as an RTPC merely because the DDC wants it to be one, but there has already been one case in the first round of RTPCs in which a district convinced MPND that a key market centre had been overlooked in constructing the short list. In this case, Elgeyo Marakwet DDC was ultimately allowed to select Kapsowar as their RTPC.

In other cases, the DDC preferences for using RTPC funding did not meet programme guidelines. In Bungoma District, for example, the DDC originally wanted to split their allocation of funding among several centres. In Wajir District, there was a preference for using RTPC funding to construct water projects in all of the RTPC candidate towns. In such cases, the DDCs were informed that they could only use the funds for the purposes outlined in the programme guidelines. RUPS must be careful to take district preferences into account, but should not allow the purpose of the RTPC programme to be undermined.

Suggestions for New RTPC Site Selection Criteria

On the basis of observations made during DDFS field trips to current RTPCs, there are a few additional RTPC site selection criteria which may help RUPS to avoid certain problems and inadequacies that have been encountered in the first round. These are: 1) land availability; 2) construction activity; and, 3) linkages to larger urban centres. Each of these will be discussed briefly in turn.

Land Availability

In several of the RTPCs selected for the first round, there were problems with a lack of availability of public land on which to construct RTPC projects. In most cases, there was only a problem with lack of land for a single project, but in one case (Mwingi in Kitui District, Eastern Province), there was no public land available for any of the proposed RTPC projects. This led to a situation in which this particular RTPC was facing the possibility of using up much of their DDF allocation of funds to acquire land rather than build infrastructure. Although the RTPC programme guidelines originally stated that DDF money could be used for land acquisition "where necessary," it has been in retrospect decided that DDF funds cannot be used for this purpose. Thus, it would be useful to add "availability of public land" in the RTPC candidate towns as one of the RTPC site selection criteria.

This criterion would serve only as a general guide to the suitability of a particular centre for participation in the RTPC programme. Different types of RTPC projects will require different types of land. For example, a market would have to be located centrally and conveniently to facilitate trade, whereas a livestock auction yard or a slaughterhouse would best be located away from the central area of the town. These types of distinctions only become relevant after an investment package has been identified for a particular RTPC.

Construction Activity

During the fieldwork conducted to prepare short lists for the districts participating in the second round of the RTPC programme, RUPS officers noted that the RTPC site selection index did not take into account the level of construction activity in the urban centres being surveyed. In some centres, little or no construction activity was observed, while in others, it seemed that the number of square metres of commercial establishments would soon be doubled through new construction. Presumably, such investment would not be taking place if profits and future growth were not anticipated. Not taking account of such activity may count heavily against some dynamic urban centres that would make excellent RTPCs. It is therefore recommended that a metric index of construction activity, similar to the metric index of business activity currently employed, be calculated for active construction of permanent structures occurring in the central business area of urban centres being studied as possible RTPC candidates. If possible, weights could be assigned on the basis of the type of establishment being constructed.

Linkages to Larger Urban Centres

In DDFS field trips for the first round of RTPCs, officers discovered that the most dynamic of these urban centres were those which had strong trading ties with other urban centres, particularly large cities, such as Eldoret, Nairobi, Thika, and

Mombasa. Experience and urban economic theory suggest that the existence of urban-urban linkages that go beyond the centre's catchment area may be just as important for the success of an RTPC as the existence of rural-urban linkages.

Although such linkages are difficult to measure objectively, it would be possible to develop a simple scale on which RUPS officers subjectively rate RTPC candidates on the basis of their linkages to other urban centres. This could be done relative to other RTPC candidates in the same district, rather than on some absolute scale. Although it is generally preferable to steer clear of scaled measures that involve judgements, such measures have been used in assigning values to other criteria when it was felt that the criteria were important and no more objective alternative existed. Simple methodologies to collect basic data on urban-urban linkages could be developed at a later date for future use.

Conclusions

Given the scarcity of certain types of relevant data and the time and expense involved in data collection, it is neither possible nor desirable to attempt to perfect the data and methodology used to identify RTPC districts and centres. There is a tradeoff between a better selection process and criteria and the resources required to make these improvements. Certain improvements discussed in this paper, however, are likely to be worth the time and effort involved in making them, particularly

those related to the selection of RTPC candidate centres within districts. At the very least, the improvements could be calculated for the next round of RTPC candidates and compared to the results of the existing indexes. Those improvements that make an intuitively reasonable and quantitatively substantial difference in the ranking of candidate RTPCs within districts can be retained, and those that produce suspect results or do not have a noticeable impact can be discarded.

The most important future task of RUPS and DDFS with respect to the RTPC selection criteria is to attempt to maintain the integrity of the selection process. It is clear that there will be a political and bureaucratic battle in future rounds of the RTPC programme to standardize more fully the use of established criteria for RTPC selection. This battle will not be easily won, as demonstrated by the fact that, during the process of selecting the second round of RTPC districts to be funded during the 1989/90 financial year, a third district was added to the two districts that were selected from Rift Valley Province using MPND criteria.

The added district, which scored lower on the selection index than several other districts in Rift Valley Province which have not yet benefitted from the RTPC programme, was selected purely for political reasons.²⁷ While this district's selection is a special case, the objectives of the programme will be

²⁷Baringo, the district that was added, would have been eligible for RTPC funding in the 1991/92 financial year if the current criteria had been followed.

seriously undermined if political criteria become generally more important than economic criteria in selecting other districts and their RTPCs. This would particularly be a problem if RTPC sites within districts that did not meet the requirements of the programme were selected to benefit from DDF funding for political reasons.

Whatever the problems with the RTPC selection criteria, they represent a serious attempt to institutionalise a reasonably objective process of selecting urban centres that will further the Government of Kenya's regional development and economic growth goals. It is, therefore, important to ensure that these criteria continue to be used and that they are modified as necessary and possible to effect a better RTPC selection process.

REFERENCES

Bendavid-Val, Avrom, et. al., "Rural-Urban Exchange in Kutus Town and its Hinterland," (Worcester, MA: Cooperative Agreement on Settlement and Resource Systems Analysis (SARSA), Clark University, July 1988).

Cohen, John M. and Richard M. Hook, "District Development Planning in Kenya," Development Discussion Paper No. 129 (Cambridge, MA: Harvard Institute for International Development, 1986).

Evans, Hugh, "Rural Trade and Production Centres: Towards a Strategy for Implementation," RMRD Discussion Paper No. 6 (Nairobi, Kenya: Harvard Institute for International Development, Resource Management for Rural Development Project, Ministry of Planning and National Development, 1986).

Gaile, L. Gary, "Rural Trade and Production Centres," RMRD Discussion Paper No. 5 (Nairobi, Kenya: Harvard Institute for International Development, Resource Management for Rural Development Project, Ministry of Planning and National Development, 1986).

Government of Kenya, Economic Management for Renewed Growth, Sessional Paper No. 1 of 1986 (Nairobi, Kenya: Government Printer, 1986).

Government of Kenya, District Focus for Rural Development, Revised Edition (Nairobi, Kenya: Office of the President, March 1987).

Government of Kenya, "Technical Recommendation of Districts from Which Proposals for Initial Rural Trade and Production Centres Will Be Solicited," Technical Report No. 1 (Nairobi, Kenya: Rural Planning Department, Ministry of Planning and National Development, March 1987).

Government of Kenya, "Selection Criteria and Guidelines for Rural Trade and Production Centres," Technical Report No. 2 (Nairobi, Kenya: Rural Planning Department, Ministry of Planning and National Development, May 1987).

Government of Kenya, "Rural Trade and Production Centres: Selection Criteria and Guidelines for the Selection of the Initial Towns in the Programme," Technical Report No. 3 (Nairobi, Kenya: Rural Planning Department, Ministry of Planning and National Development, July 1987).

Government of Kenya, "Technical Handbook for Computing Selection Criteria for Rural Trade and Production Centres," Technical Report No. 4 (Nairobi, Kenya: Rural Planning Department, Ministry of Planning and National Development, August 1987).

Government of Kenya, International Labour Organization, United Nations Development Programme, "A Strategy for Small Enterprise Development in Kenya," (Nairobi: GOK/ILO/UNDP Centre Project, August 1988).

Government of Kenya, Sixth National Development Plan, 1989-93 (Nairobi, Kenya: Government Printer, 1989).

Smoke, Paul, "District Development Fund Programmes in Kenya: A Preliminary Assessment of Implementation Progress," RMRD Discussion Paper No. 9 (Nairobi, Kenya: Harvard Institute for International Development, Resource Management for Rural Development Project, Ministry of Planning and National Development, September 1989).