THE NEED FOR BALANCED DEVELOPMENT OF RURAL AND URBAN SECTORS IN SAUDI ARABIA

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ABSTRACT

Rural development is thought to be undermined if compared to urban development in the third world. It is hypothesized that the higher the degree of rurality of a given region in the Kingdom of Saudi Arabia the lower the degree of adequacy of its community facilities and services. Rurality was expressed as an index of the proportion of people engaged in agriculture. Health and educational services and facilities were selected to represent community facilities and services because of their believed centrality and pervasiveness in the community. Their indices were expressed in terms of a ratio composed of a number of inhabitants per a unit of a given service or facility. Regions were ranked by rurality and by adequacy of eight community facilities and services and the relationship between rurality and each of these community facilities and services was tested. Except for some of the educational facilities, the findings were conclusive and in support of the proposed hypothesis. Thus concern for rural development must be pursued for the achievement of balanced and integrated national development.

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INTRODUCTION

Social scientists, today, report that world societies are witnessing massive and far-reaching processes of change. The twentieth century's rythm of change is beating with an unprecedented scope and implications extending particularly to the rural sector of societies.[1] Change that has brought up the developed world to their contemporary status has taken place gradually and across a relatively longer period of time excluding few exceptions like Japan and USSR. The communication and transportation revolution has conveyed the achievements and material products of the western civilization to the peoples of the developing world. This demonstration effect along with the rise of nationalist movements in these countries were among the driving forces responsible for initiating and accelerating change processes designed for national development and raising level of living standards of the masses. Speedy plans, for attaining quick results, lack of expertise and inefficient administrative organs in the developing world were among the many factors responsible for the state of imbalance characterizing their development policy and the consequent ineffectiveness of their plans.

Compared to urban development, rural development was undermined and mostly underestimated by planners and policy makers in these countries. The existence of government bodies in urban centers, the complicated and densely structured network of interrelationships and the like all made for visibility of urban problems and created a bias on the part of such plannérs favoring priorities of urban

development over the poor rural sector and its chronic problems. This bias is not only practiced in the realm of rural-urban alternatives but also within the rural sector itself, i.e., between larger and smaller rural communities. Earl. O. Heady (1978:540) has rightfully titled this latter bias "rural colonialism" as he states:

.... the setting of rural communities is not unlike the categories of underdeveloped countries over the world. Some have endowments which draw foreign firms to them in order that their resources might be exploited in terms of the goals of the foreign entity. In this sense, do we have also a kind of colonialism for rural communities?.

He also specifies the imbalanced government spending favoring urban development over rural development as follows:

In the last three decades, our public investments and the configuration of ongoing national growth have generally been in the favor of larger urban or megalopolis centers. The public attack on slums has been focused on the central cities, although the relative concentration of slum conditions is greatest in rural areas. (p. 541).

PURPOSE OF THE STUDY

Inspite of the fact that the Kingdom of Saudi Arabia has been endowed by tremendous amounts of petrolium revenues and the availability of abundant resources necessary for national development it is still the hypothesis of this study that rural development, compared to urban developmet, is undermined just as manifested by the poor developing countries. In case of findings' support of this hypothesis, undermining rural development will have to be regarded in a context other than lack of funds or necessary

appropriations as the jargon is usually expressed in the developing world. In other words, in a rich country like Saudi Arabia with its economy of abundance if the development of the rural sector will still be found comparatively undermined, factors other than lack of funds will have to be responsible for such state of imbalance between rural and urban development.

Thus, the immediate purpose of this is to discover whether or not a significant relationship exists between the degree of rurality, or urbanity, on the rural-urban continuum on one hand and the degree of adequacy of community facilities and services on the other.

METHODOLOGY

Until very recently reliable statistics on Saudi Arabia has been most difficult to attain because of ecological and social barriers. Statistics regarding the Kingdom's population has been a subject of dispute for some years. An official estimate for january lst, 1956, put the figure at 6,036,400. A census was held in 1962 - 63 but results were officially repudiated. Later at mid-1965 the UN Population Division issued a population estimate of 6,750,000 and projected figures of 7,740,000 for mid-1970 and 8,966,000 for mid-1975. A census had been completed by mid-1974, a necessary preliminary to the ambitious second five year development plan (1975-1980). First reports put the census total for Saudis at 4.3 million but later the figure 7,012,643 was announced, though many observers still believe the lower figure to be more realistic[2].

The data analyzed by this study was taken from the official reports of the last 1974 census published by the Saudi Ministry of Finance and National Economy. The

hypothesis of this study might be restated as follows: Among the thirteen geographical regions of Saudi Arabia the higher the relative rank of rurality of a given region the lower its rank with regard to adequacy of community facilities and services.

Measurement of Regions' Degrees of Ruraliy... The nature of rurality has been studied theoretically and empirically by increasing number of social scientists as the phenomenon itself is subject to continuous and structural change. Meanings of rurality range from being an occupational construct, ecological construct, to its being a sociocultural construct[3]. Others still consider it a structure of all these meanings combined with variant degrees of salience of such components depending on the socio-geographical nature of the unit of study[4]. The validity of the occupational construct was found most conspicuous if rurality was measured on a unidimensional scale.

This study makes use of this latter finding and accordingly considers the proportion of the region's population engaged in agriculture as the operational index of degrees of rurality. This index was calculated for each of the thirteen regions of Saudi Arabia as it ranged from a minimum of 22% for the Eastern Region to a maximum of 90% for Al-Baha region.

Measurement of Regions' Degrees of Development of Community Facilities and Services... Health and educational services were selected from the multitude of community facilities and services because of their assumed centrality and the availability of pertinent data. With regard to health services five indices were calculated for each of the thirteen regions:

1. Number of physicians to population ratio.

2. Number of hospital beds to population ratio.
3. Number of chemists and druggists to population ratio.
4. Number of employees in the health sector to population ratio.
5. Number of pharmacies and drug stores to population ratio.

Each of these ratios was expressed in the form "1: given population number." For example, the number of physicians to population ratio for Riyadh region was found 1: 3775 which means that every 3775 inhabitants of the region are being served by one physician.

Also, the following three indices were selected for evaluating educational services:

1. Number of classrooms to population ratio.
2. Number of classrooms to student ratio.
3. Students' percentage of the region's population.

Testing the Hypothesis... Spearman's rank order correlation coefficient was calculated for testing the relationship between ranks of regions was calculated for testing the relationship between ranks of regions according to their degrees of rurality on one hand and each of the regions' ranks according to each of the five indices of health services on the other and also between the former variable and each of the three indices of educational facilities and services. All coefficients are expected to be negative and exceeding a. 05 level of significance.

RESULTS AND DISCUSSION

The findings of this study indicate that the region found most rural was Al-Baha region as the propotion

Table 1. Distribution of Saudi population according to engagement in agricultural and nonagricultural occupations in different regions*

Region	Nonagricultural pop.		Bedouins		Farmers		Agricultural pop. (Bedouins + Farmers)		Total pop. (Nonagr. + agr.)	
	Number	%**	Number	%	Number	%	Number	%	Number	%
Al-Baha	18345	9.87	28908	15.55	138652	74.58	167560	90.13	185905	100.00
Asseer	165326	24.27	246477	36.17	269558	39.56	516035	75.73	681361	100.00
Ha-il	70476	27.11	142719	54.91	46734	17.98	189453	72.89	259929	100.00
Al-Jouf	17595	26.87	31401	47.94	16501	25.19	47902	73.13	65497	100.00
Jizan	162775	40.38	15945	3.96	224386	55.66	240331	59.62	403106	100.00
Najran	61568	41.60	56415	38.13	29987	20.27	86402	58.40	147970	100.00
Al-Kasseem	148577	46.92	101193	31.96	66870	21.12	168063	53.08	316640	100.00
Al-Medina	254193	48.95	237099	45.66	28002	5.39	265101	51.05	519294	100.00
Tabouk	98426	50.80	88375	45.61	6962	3.59	95337	49.20	193763	100.00
Al-Qurayat	16577	52.78	12972	41.31	1855	5.91	14827	47.22	31404	100.00
Riyadh	853446	67.08	306470	24.09	112359	8.83	418829	32.92	1272275	100.00
Mecca	1283380	73.16	240474	13.71	230254	13.13	470728	26.84	1754108	100.00
Eastern Region	596942	77.56	79460	10.32	93264	12.12	172724	22.44	769648	100.00

*Regions are descendingly ranked by degree of rurality

**All percentages are calculated in relationship to the total population of each region.

of prpulation engaged in agriculture reached 90.13 percent. The least rural region, i.e., most urban, was the Eastern Region as the proporation of people engaged in agriculture did not exceed 23 percent of its total population. Table 1 illustrates the distribution of Saudi population according to agricultural and nonagricultural engagements in different regions.

With regard to rurality, or the proportion of people engaged in agriculture as mentioned before, Al-Baha region ranked number one, Asseer second, Ha-il third, Al-Jouf fourth, Jizan fifth. Najran sixth, Al-Kasseem seventh, Al-Medina eighth, Tabouk nineth, Al-Qurayat tenth, Riyadh eleventh, Mecca twelveth, and the Eastern Region ranked thirteenth.

According to the hypothesis of this study, the Eastern Region found least rural is expected to enjoy the highest provisions of health and educational services and facilities. Tables 2 and 3 present regions' health and educational data as regions' health and educational data

respectively as regions are ranked by rurality and corresponding data regarding health and educational facilities and services are presented. Al-Baha and Asseer regions, regarded by health authorities as one region,i.e., the Southern Region, ranked first and second by rurality and their share of health facilitities and services was greatly undermined as their average rank was 11.5 with respect to health service number 1, 8.5 by health service number 2, 10.5 by health service number 3, 11.5 by health service number 4, and 12.5, that is last, by health service number 5.

On the other hand, the inspection of the findings regarding the three least rural or most urban regions, Riyadh, Mecca. and the Eastern Region, provides another support for the hyporthesis of this study. This time their share of health services and facilities is overweighted as they ranked first, second, and eighth by health service number one, third, first, and sixth by health service two, first, second, and third by health service number three, first, second, and fourth by health service number four, and second, first, and third respec-

Table 2. Number of inhabitants served by one unit of selected health services in different regions in Saudi Arabia.

Region	Inhabitants per physician		Inhabitants per hospital bed		Inhabitants per druggist or chem.		Inhabitants per health employee*		Inhabitants per pharm. or drug st.	
	Number	Rank	Number	Rank	Number	Rank	Number	Rank	Number	Rank
Al-Baha++	10084	11	1931	8	289088	10	1807	11	96362	12
Asseer	10084	11	1931	8	289088	10	1807	11	96362	12
Ha-il	12377	13	2599	10	———	—	2523	13	43321	7
Al-Jouf	5699	5	2642	11	96887	4	1226	6	48443	8
Jizan	8958	10	1807	7	403106	12	1632	10	80621	11
Najran	7398	9	1254	5	147970	8	1298	9	36992	6
Al-Kasseem	4589	3	899	2	158320	9	971	3	35182	5
Al-Medina	5353	4	1076	4	129823	7	1129	5	28850	4
Tabouk	5699	5	2642	11	96887	4	1226	6	48443	8
Al-Qurayat	5699	5	2642	11	96887	4	1226	6	48443	8
Riyadh	3775	1	941	3	20857	1	647	1	9424	2
Mecca	4206	2	342	1	54816	2	881	2	8598	1
The Eastern Region	6157	8	1372	6	96206	3	1122	4	12813	3

*Other than physicians

++Regarding health data Al-Baha and Asseer regions are considered one region,i.e.,the Southern Region. Similarly, Tabouk, Al-jouf, and Al-Qurayat regions form one region, i.e., the Northern Region.

Table 3. Selected indices of educational services in different regions of Saudi Arabia.

Region	Inhabitants per one classroom		Students per one classroom		Students' percentage of total population	
	Number	Rank	Number	Rank	Percent	Rank
Al-Baha	213	4	18.25	2	8.57	6
Asseer	329	9	21.24	3	6.45	10
Ha-il	375	11	18.21	1	4.86	13
Al-Jouf+	323	7	23.17	5	7.17	7
Jizan	368	10	24.79	7	6.73	9
Najran	477	12	26.56	10	5.57	11
Al-Kaseem	174	2	21.71	4	12.44	4
Al-Medina	300.	6	29.67	12	9.88	5
Tabouk	512	13	25.74	8	5.02	12
Al-Qurayat	323	7	23.17	5	7.17	7
Riyadh	182	3	26.55	9	14.56	2
Mecca	234	5	29.69	13	12.66	3
The Eastern Region	172	1	29.19	11	16.34	1

+Regarding educational data, Al-Jouf and Al-Qurayat regions are considered one region, i.e., the Northern Region.

tively by health service number five. The obvious meaning of this is the disproporationate enjoyment of urban regions in terms of the existence of better health facilities and services as compared to rural regions. The only exception to these findings is the unadvanced rank of the Eastern Region with regard to physicians and hospital services and facilities. Table 4 summarizes the regions' ranks with respect to rurality and all health and educational services and facilities beside the calculated values of Spearman's rank order correlation coefficients for testing the significance of correlations between rurality on one hand and each of these services on the other.

As expected by the hypothesis, all correlations between rurality and adequacy of health services were found negative and significant at the. 01 level of significance. The only exception to these findings was the correlation between rurality and adequacy of hospital beds or capacity of hospital accomodation as the value of calculated r was found -.386. However, the negative tendency of correlation is still clearly manifested.

The findings pertained to the relationship between rurality and adequacy of educational services were not conclusive. The only definitive support of the hypothesis of this study was attained by the correlation between degree of regions' rurality and the proportion of their student population. A negative Spearman's rank order correlation coefficient significant at the. 05 level of significance indicates that the higher the degree of rurality of a given region the lower the proportion of its student population. Thus, rural regions do not place as higher value upon educational achievement as being expressed by urban regions. This might indicate a need on the part of responsible authorities to try to change the values of rural population towards the adoption of science and rationality and the elevation of their level of educational aspirations. The Eastern Region, Mecca and Riyadh, the three least rural regions, had the highest proportions of student population. On the opposite direction stood the mostly rural regions of Ha-il, Tabook, Najran, and Asseer having the lowest proportions of student population.

Table 4. Summary of regions' average[+] ranks with regard to rurality and adquacy of health and educational services and facilities.

Regions ranked by rurality	Inhabitants per physicim	Inhabitants per hosp. bed	Inhabitants per druggist or chemist	Inhabitants per health employee	Inhabitants per pharmacy or drug stom	Inhabitants per class-room	Studen. per class	Studen. percentage
1.Al-Baha	11.5	8.5	10.5	11.5	12.5	4	2	6
2. Asseer	11.5	8.5	10.5	11.5	12.5	4	2	6
3.Ha-il	13	10	—	13	7	11	1	13
4.Al-Jouf	6	12	5	7	9	7.5	5.5	7.5
5.Jizan	10	7	12	10	11	10	7	9
6.Najran	9	5	8	9	6	12	10	11
7.Al-Kasseem	3	2	9	3	5	2	4	4
8.Al-Medina	4	4	7	5	4	6	12	5
9.Tabouk	6	12	5	7	9	13	8	12
10.Al-Qurayat	6	12	5	7	9	7.5	5.5	7.5
11.Riyadh	1	3	1	1	2	3	9	2
12.Mecca	2	1	2	2	1	5	13	3
13.The Eastern Region	8	6	3	4	3	1	11	1
VALUE OF r[++]	-.765	-.386	-.806	-.820	-.765	-.348	.771	-.598
Significance	(.01)	(n.s.)	(.01)	(.01)	(.01)	(n.s.)	(.01)	(.05)

[+]Average rank means that if two regions have the same score on a given health service they will both have the same rank and that is supposedly 11. The average rank for each of them will be 11.5.

[++]r is Spearman's rank order correlation coefficient between ranks of regions' rurality and ranks of regions by each of the health and educational facilities and services.

However, in this regard, the findings of this study has uncovered a surprising phenomenon. A strong positive correlation was found between regions' degree of rurality and size of students per classroom as the value of r was found +.771. Thus, rural regions do have small size classes in comparison to urban regions. This takes place inspite of the fact that there is only a tendency for regions to have relatively smaller number of classes per a given number of inhabitants. The fact that this is only a tendency leaves the rationale behind the relatively smaller student population in rural regions to be attributed to the lower educational aspirations of the rural people as mentioned before.

SUMMARY AND CONCLUSIONS

The process of rural development aims at the achievement of structural transformations in the rural sector of societies implicating consequent advancements in the economic, social, and psychic spheres of human life. Naturally, rural development is a part of national development of which the other part is urban development. Successful national porgress must be characterized by baianced and integrated rural-urban development processes.

It is the hypothesis of this study that rural development in the third world is particularly undermined as compared to what is happening in the urban sector of such societies. This bias in favor of urban communities is attributed to their containement of government bodies, existence of strong pressure groups, tourism, concentration of industry and commercial activities, and the continually rising expectations of the urban population.

The yielding of government developmental efforts to these pressures will end up with a continuous deterioration of the rural sector and consequently with an impotent agricultural base. With this in mind, the present study aims at testing its hypothesis in the Kingdom of Saudi Arabia. This kingdom has a rare and distinct status among other countries of the developing world, that is, the existence of sufficient monetary resources necessary for funding all aspects of national development plans. If such bias in favor of urban development proved to be still existent then factors other than lack of funds will have to be explored.

In operational terms, the hypothesis of the study was stated as follows: the higher the degree of rurality of a given region the lower the adequacy of its health and educational facilities and services. As expressed by the 1974 census data, the Kingdom is composed of thirteen regions. The degree of rurality of each region was measured as the proportion of its population engaged in agriculture. Five indices of health services and facilities were calculated: (1) Physicians to population ratio. (2) Number of hospital beds to population ratio. (3) Number of chemists and druggists to population ratio. (4) Number of employees in the health sector to population ratio. (5) Number of pharmacies and drug stores to population ratio. Also, three indices of educational services were calculated: (1) Number of classrooms to population ratio. (2) classrooms to students ratio. (3) Students' percentage of the region's total population.

Regions were ranked according to degrees of rurality and the rank of each region with respect to the adequacy of each of the above mentioned eight services and facilities was also identified. Spearmans' rank order correlation coefficients were calculated to test the relationships between regions' ranks by rurality on one hand and regions' ranks by each of the health and educational facilities and services on the other.

Most correlations between regions' rurality and adequacy of health service and facilities were found in concordance with the proposed hypothesis. They were all negative and significant at the .01 level of significance. The only exception to these findings was the correlation between rurality and adequacy of hospital beds or capacity of hospital accomodation as the value of calculated r was found only -.386. However, the negative tendency of correlation is still being manifested. The findings pertained to the relationship between rurality and adequacy of educational services were not as conclusive as those of the health services and facilities. The significant correlation found between regions' rurality and the proportion of their student population was the only support found for the proposed hypothesis.

In conclusion, the findings of this study point to the need for balanced emphasis on both rural and urban sectors in the formulation and implementation of national development plans in the Kingdom of Saudi Arabia. The economy of such country endowed by tremendous financial resources must not be left for conspicuous consumption and non-productive but quick profit making economic activities. Inspite of their costly investmemts in an arid country like Saudi Arabia, rural and agricultural developments do require a lot more emphasis and concern.

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(1) For more details on this dramatic change see Berry (1976); Paige (1975) and Larson and Rogers (1964). The latter authors (p. 60) listed seven major changes in the rural sector at that time: (1) An increase in

farm productivity per man accompanied by a decline in the number of farm people. (2) An increasing linkage of the farm and nonfarm sectors. (3) Increasing specialization of farm production. (4) Decreasing rural-urban differences in values. (5) Increasing cosmopolitanism of rural people in their social relations. (6) Centralization of decision making in rural public policy of agribusiness. (7) A decrease in the importance of primary relations... and an increase of secondary relations.

(2) For more details see Europa Publications (1976-77:598).

(3) The sociocultural construct is probably the least acceptable to social scientists because of its generality and operational diffuseness. However, it has been widely treated and proved most useful mainly in theoretical discussions and particularly in the classical rural-urban, sacred-secular, Gemeinshaft-Gesellshaft types of treatments.

(4) In a study of his own. the author (1974) empirically explored the meaning of rurality in terms of three constructs, i.e., the occupational, ecological and demographic. Units of analysis, being Egyptian governorates, counties, and individual communities, were found responsible for the type of triadic structure of indices of rurality. For example, on the level of governorates the occupational construct, i.e., the proportion of people engaged in agriculture was found alone quite sufficient for assessing the relative degrees of rurality of Egyptian governorates. On the level of counties, proportion of the population engaged in agriculture, proportion of rural inhabitants, and average community size were identified as a triadic structure of indices of rurality with corresponding weights of .664, .241, and .175 respectively. On the level of communities it was suggested that the urban status might be granted to all capitals of governorates and counties as well as all other communities whose proportion of population engaged in agriculture is equal to or smaller than the average value pertained to all capitals of counties other than those regarded as also capitals of governorates. The rural status would then be granted to all other communities.