HOW DISADVANTAGEOUS IS REGIONAL ISOLATION.
THE CASE OF MITZPEH RAMON

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One of the unique socio-economic phenomena of the Israel landscape is the 'development town'. Its history is closely connected with the massive immigration of new population in the course of nineteen fifties and sixties, when the country faced three simultaneous processes.

1. Massive immigration which doubled the Jewish population in three years from 1948 to 1951 and doubled it again in the following fifteen years. [1]

2. A radical change in the demographic composition of immigration, from migrants of mainly European origin to those from Asia and North-Africa. [2]

3. The agro-technological revolution in the developed countries, following World War II, which, due to increased productivity in agriculture, led to a sharp reduction in the required size of labor force in land cultivation. [3]

Consequently, the traditional patterns of absorption policy for new immigrants, suggesting agriculture as a first option, became soon irrelevant and new, urban models had to be conceived for initial settlements. Such urban settlement solutions for migrants who had not be endowed with financial or relevant human capital, had been combined with supplementary objectives, such as the encouragement of a balanced distribution of the population to counterbalance the heavy demographic congestion of the population in the Central-West districts, compared to the peripheries in the North and especially in the South. [4] An additional constraint was the shortage of public capital, which imposed low cost models.

Thus, from 1951, for about 15 years a network of some 40 new towns were established, named 'development towns'. Their exact number depends, of course, on the definitions used by different scholars. We follow the definition of Professor G. Lipshitz in his numerous writings on the issue. [5]
The population-dispersion strategy is visible through the fact that of the 39 Development Towns in the Lipshitz (1990) study 36% are located in the North, and 33% in the South, meaning that close to 70% of all development towns are in the peripheries, compared to 28.6% of the total Jewish population who live in the Northern and the Southern Districts. [6]
In 1990 over 840.000 men, women and children dwelled in development towns, 46.4% of them in the South, 28.7% in the North and only 24.9% in the Center.

Size variations among the towns is significant. The largest "Development Town" Be'er Sheva is now a major city with 113.000 inhabitants and the smallest has a population of about 2,000. They differ from most other urban settlements in the relative poverty of most of them and also in the fact that, compared to the other towns and cities, most development towns are not yet economically self-contained at the publicly accepted standard of living of Israeli population. [7]

Mitzpeh Ramon is one of the Development Towns in Israel. It is quite unique in the sense that it is the most isolated urban settlement, located in the midst of the Negev desert, in considerable distance from other urban, and even rural settlements. (excluding temporary encampments of Bedouin tribes). Its distance from the great urban center of Tel Aviv is over 164 km., and the closest major city is about 60 km. of uninhabited desert away. The elevation of the region is more than 800 meters above sea level. The area is, arid with very dry air, little precipitation (about 100mm. per annum) and extreme differences in temperature between day and night. Population density is very low and according to the criteria set by E.Efrat [7] the whole region is classified as "highly disadvantageous" (p.129). The settlement was established as a temporary abode, in the late nineteen fifties for workers employed in various national infrastructure projects and in a by now disfunct cooper mine. The 1961 Census reported at Mitzpeh Ramon about 300 inhabitants and the place was considered as a temporary settlement during much of the nineteen sixties. Under economically rational profit maximization conditions the place would have been abandoned after the completion of the infra-structure projects and the closure of the mine and become a ghost town evaporating under the perils of the desert climate. However, "the principal objectives guiding the planners was the need to establish settlements throughout the length and the breadth of the country".[8] So Mitzpeh Ramon survived the completion of the projects, the facilitation of which was its original raison d'etre. In the National Census of 1972 the town reported a population of 1.400 inhabitants in some 300 households. Most of them were young families with 4 persons in an average household, compared to the number of persons per household in other southern development towns of similar origin {5.6 (Netivot) and 5 (Ofaqim).} Population in the regional control group of Southern development towns [9] evolved until the eighties as folows.

Year	1961	1972	1983	growth: 61-72	72-83
Mitzpeh-Ramon	300	1,400	2,900	318%	107%
Control Group	14.100	44,900	53,900	218%	20%

As shown, the rate of growth of population in Mitzpeh Ramon was considerably faster than in the control group notwithstanding the isolation factor.
Such a rapid rate of growth still left the town small and deserted, far away from the rural and urban conglomerates of the South, connected to them by a 65km. long narrow, low quality road. This is a considerable distance in the Israeli context.
Even this growth rate was not the result of plain market forces. The authorities made substantial efforts to enhance the attractiveness of the town. It was granted the highest level of economic priorities (A+) and benefited from a long range of "correcting discrimination" measures, from liberal income tax discounts to lavish benefits for potential investors. The participation of the government in the municipal expenses (ordinary budget) per person in the nineteen eighties (1983) was 3.2 times higher than the national average and 2.3 times higher than the average per-person-subsidy in the development town sector. The parallel figures for 1985 were 9.4 and 4.2 and for 1986 3.5 and 2.3. Comparison to the municipal per-person-subsidy in the

control group shows that Mitzpeh Ramon was supported 2.7 times more (1985) than the towns belonging to the control group. All these measures indicate that the authorities considered the existence of that remote and isolated little town in the middle of the desert an important objective, worth of government support. Furthermore, since employment opportunities were, obviously, limited, the authorities enabled the availability of public sector jobs to sprawl and reach over one half of all jobs (in 1983). This was abnormally high, surpassing by close to 60% the national average and by close to 23% the ratio of public sector jobs in the control group. Such a liberal policy of allowing the public sector to swell beyond objective needs, at the expense of the taxpayers, were undoubtedly responsible for the very low level of unemployment in Mitzpeh Ramon, as shown below.

Unemployment in Mitzpeh Ramon in 1984 and 1989

Year	Mitzpeh Ramon	Control Group	Dev.Towns	Country
1984	1.8%	4.8%	3.1%	2.0%
1989	4.0%	13.0%	9.5%	4.5%

The figures are suggestive, pointing to the fact that both in low (1984) and high unemployment years (1989) the rate of unemployment in Mitzpeh Ramon was well below any average. The authorities understood that in such isolated locations high unemployment leads to massive desertion of the town, and its attraction is positively correlated to its population. Thus, one basic condition to group existence under circumstances of strong comparative dejection, such as geographic isolation and the surrounding desert, is the solid safeguard of livelihood through high employment. Another condition is the provision of a decent quality of life within the accepted standards of the Israeli society. The main ingredients of such standards of living package, as understood by the authorities, was culture, accomodation and mobility. Culture includes educational facilities, cultural facilities and social environment. [10] Mitzpeh Ramon was reasonably well endowed in all three dimensions of quality of life criteria. In education, the amount of human capital is measured by the ratio of university graduates in the population, as indicated below:

The percentage of university graduates in Mitzpeh Ramon in 1972 & 1983

Year	Mitzpeh Ramon	Control Group	Dev.Towns	Country
1972	14.2%	6.6%	6%	11%
1983	18%	10.5%	12.4%	21%

The amount of human capital embodied in the population of Mitzpeh Ramon in the nineteen seventies and eighties is larger than in either the control group or the development towns in general. The willingness of a small but high quality group of people to live in Mitzpeh Ramon is indicative to certain features of the town, appreciated by its inhabitants, despite the shortcomings of its isolation.
One reason could be the availability of spacious accomodation - of four rooms or more per apartment - which was - in 1983 - very high, 44.5% of all apartments, as compared to the control group with 28.6%. The same applies to the most common

symbol of mobility, the ownership of motor vehicles. Ownership of a motor vehicle is particularly important in isolated localities. The growth of the level of motorization is shown below.

Number of cars per 1,000 persons in 1970 & 1986 in Mitzpeh Ramon

Year	Mitzpeh Ramon	Control Group	Dev. Towns	Country
1970	22	10.5	23.1	55.5
1986	120	70.5	101.6	152

The ratio of cars in Mitzpeh Ramon compared to the development towns' average increased from 0.95 (22/23) in 1970 to 1.18 (120/101). In other words, the rate of motorization in Mitzpeh Ramon was considerably faster than in other development towns. Comparison with the country at large suggests that the motorization lag contracted from 0.4 (1970) to 0.8 (1986)

By the end of the nineteen eighties Mitzpeh Ramon was a small isolated town with about 3,000 inhabitants whose standard of living was higher than that of control group towns in the same sub-districts, due to the insistence of the authorities to keep the town alive both economically and socially. As of 1989 fortunes changed for the better with the arrival of a massive inflow, mainly of new immigrants from the former Soviet Republics. [11]

The new wave of immigration increased population by close to 50% and the 1995 National Census reported of 4,500 inhabitants in Mitzpeh Ramon. In the 1995 Census only 51% declared Mitzpeh Ramon as their residence in 1990. 22% immigrated to it from other locations and 27% from abroad, adding 504 new immigrant households to the town. This was greatly different from the control group, which only gained through immigration an additional 25% to its population from 1990 to 1995, one third of it from other locations and two thirds from abroad. In this respect Mitzpeh Ramon displayed, after 1989, considerable vitality, despite its isolation.

Let us to draw some general conclusions from the evolvement of Mitzpeh Ramon on the impacts of isolation.

Some of the major handicaps of isolation and distance from core economic and cultural centers are:

Economic aspects:

1. distance and isolation increase transportation costs of both inputs and outputs and diminishes competitiveness of the producing enterprises.
2. distance and isolation reduce the relevant sphere of employment opportunities for the potential employee as well as the relevant radius of search for labor force for the employer, reducing thereby the chance to obtain an optimum match between workers and jobs.

3.distance and isolation from major conglomerates of consumers reduces the size of the relevant market and sets limits to the optimum division of labor, detrimental to consumers' welfare and level of services. [12]

4.distance and isolation reduce competition and subsequently the quality and selection of goods and services.

Distance and isolation were estimated in an empirical study on development towns by D. Schwartz in her doctoral thesis. The factors considered and their coefficient of correlation to a large number of socio-economic variables is the following: (Figures were taken from the 1983 National Census.) [13]

Factor	Coefficient of Correlation
Distance from Tel Aviv	0.46
Minimum distance from one of the three major cities [14]	0.43
Distance from the closest town with 5,000 inhabitants or more	0.44
Distance to the international airport [15]	0.44
Distance to the closest international seaport [16]	0.46

The factor explains the variance of 89% of the variables

The mark of isolation for Mitzpeh Ramon was indeed the second highest (1.23), in the country, following Elat (3.91). However, Elat is not a development town but the Red Sea holiday resort of Israel, at its Southern tip.

Many of our hypotheses seem to be corroborated by the economic behavior in Mitzpeh Ramon. Of the 580 employees in the 13 industrial plants in the town, 11 employed less than 50 employees and only one more than 100.[17] Of the employed workers in Mitzpeh Ramon, according to the 1995 Census, 39% reach their working place by walking to work compared to 18% in the control group. The intensity of industrialization, used as one of the major economic profiles by D. Schwartz, is in Mitzpeh Ramon way below the average for the development towns investigated. Its mark is -2.30, the lowest of all 25 towns in the study.[18] On the other hand, the ratio of local workers employed out of town to guest workers employed in Mitzpeh Ramon is 0.4, compared to the ratios in the other Development Towns in the North (0.9), the Center (0.9) and in the South 1.6 [Standard Deviation=40]

The economic disadvantages of isolation seem, by all measurable indicators, rather substantial. The competitiveness of enterprises without obvious comparative advantages, is apparently limited, and uncontrolled opening of the isolated town's economy to the market endangers its economic viability, if not its existence. This fact has been known for quite some time to the authorities, who have extended substantial aid to potential investors as well as to providers of infra-structure services.

Mitzpeh Ramon has, however, one major field in which its comparative advantage cannot be matched. It is the town's location, 800 meters above sea level, its mild yet desert-like weather and the stunning landscape in its immediate vicinity, the Israeli

"Ramon Canyon", all great potentials for a thriving tourist industry. However, tourism in modern times is economically unutilizable unless it is endowed with highly developed services, both in its resorts and its environment. The obvious pre-requisite for such development is capital, which cannot be expected from solely private resources. However, if the isolated location is of sufficient importance for the public sector, economic disadvantages are surmountable through public subsidies. In this case, the isolated location and the desert can be considered as a public good, providing the community at large with externalities which can only be enjoyed through public assistance. Such analysis is very familiar to students of Economic History in the U.S during 19th century, in Europe after World War II and in numerous developing countries in our days. The major message is that economic disadvantages of isolation can be overcome, even without obvious the existence of comparative advantages, if its viability is sufficiently important for society.

Parallel to the economic handicaps one ought to examine the social implications of isolation. In these aspects, however, the case of Mitzpeh Ramon, rather unexpectedly, suggests that the handicaps are of little significance. Geographical isolation in Israel has, apparently, little impact on social life and satisfaction. The factors we use to test this hypothesis are the Level of Education and Standard of Living. In both factors, the marks given to Mitzpeh Ramon in the study of Schwartz are very high.[19] The mark given to Standard of Living was 1.47, the fourth highest, lagging behind three "selective" towns, which had not been established as solutions to low option immigrants in the nineteen fifties and sixties, but were built by groups of educated, well off Israelis with small families, high levels of education and low "dependency ratios".[20] In contrast to the "selective" towns, the standard of living marks of the control group towns of this paper were: Ofaqim -0.87; Demona -0.76; Yeruham -1.53 and Netivot -1.76.[21]

Mitzpeh Ramon was not a "selective" town. It grew into a development town from a temporary workers colony. Due to the importance of its survival at that isolated location, in the middle of the desert, it was essential that high quality human capital should be recruited and retained, because that was the sole chance to absorb high quality immigrants. If the price was official subsidization of the municipal services and the infra-structure, as well as paying for extra educational facilities by taxpayers' money, be it so. Consequently, the level of education in Mitzpeh Ramon was given the high mark of 1.25, the fourth highest among the development towns, when the top two were "selective" towns and the third Be'er Sheva, the capital of the South, hosting a major university. The average mark of the control group towns was -54.

Mitzpeh Ramon is an interesting case study of successful experiment to perpetuate at an economically difficult location a temporary colony, and rear it to the status of a small yet viable town. The justification for extensive support -beyond considerations of geo-politics and security- is its location, reflecting its isolation to employment opportunities which are constrained to local or regional opportunities. In other words, the isolation was considered its sole raison d'erte, as it was understood to be quite inconceivable that in the vast Southern desert along a strech of over 200 kilometers there should be no permanent settlement. Thus there were obvious geo-political considerations. It came only gradually to mind that the place has immeasurable economic potentialities through the utilization of the beauty the weather and the uniqueness of terrain for tourism. It is, however, a relatively novel

objective function. Tourism is a richmen's commodity, with very high income elasticity, and as long as the standard of living of the average Israeli citizen was low, he had little available income for tourism. Parallelly rising standards of living in foreign countries opened up new horizons for new tourist adventures.

In that respect, modern technology reduces the impact of isolation, both in physical distance and in communication distance. Therefore, as distances contract due to better infra-structure, faster means of transportation and real time tools of communication, the significance of isolation is gradually fading. As the world is rapidly becoming a global village, so will isolation become an economic problem heading towards solution.

Notes

[1] The Jewish population of Israel was 716,700 in 1948, 1,404,400 in 1951 and 2,299,100 in 1965. See Statistical Abstract of Israel, Table 2.1 (any year in the last decade)

[2] In 1948, of all foreign born Jews, about 85% originated from Europe and America. In 1990 the percentage was 55%. See ibid, Year 1990, p. 83

[3] The percentage of employed persons in agriculture in 1951 was 13.8%, in 1981 6.4% and in 1990 4.7%. For 1951 and 1981 see Y. Ben Porath (ed.) The Israeli Economy: Maturing through Crisis, Tel Aviv, 1989, p. 133, (Hebrew). For 1990 see Statistical Abstract 1990, op. cit., p.336.

[4] Population density per SQ.KM. in 1990 countrywide was 208.7. In the Tel Aviv District it was 6.138.6, while in the Northern District it was 169.4 and in the Southern District 38.4. See Statistical Abstract 1990, op. cit. P.41.

[5] See for example: G. Lipshitz, Development Towns - a New Basis for Policy Planning. Jerusalem, 1990, (Hebrew); Immigrant Absorption in the "Development Towns", 1990 -1995, Jerusalem, 1997, (Hebrew)

[6] Statistical Abstract 1990, op. cit. p. 45

[7] Of the numerous profiles to estimate comparative standard of living indicators in the development town sector, vis a vis the country as a whole we find "Welfare Dependency" in development towns over twice as high as in the country (2.2 to 1) while vehicle ownership per 1.000 people slightly over one half of that in the country (56%). See E. Efrat, The New Towns of Israel (1948 1988), Munchen, 1989. p. 155

[8] ibid, p.11

[9] National Census figures. The group includes the Southern towns of Netivot, Ofaqim, Demona and Yeruham, all located in the same geographical sub - region as Mitzpeh Ramon.

[10] The most convincing proof of this contention is the evolvement of the great Southern city of Be'er Sheva. It took off as a development town, isolated from the center, with all the characteristics of a subdeveloped town and now it is a vibrant metropolis, the Capital of the South. The four institutions which lifted the city up were 1. the hospital, 2. the university, 3. the theater, 4. the symphonic orchestra. Without the other three institutions the university could not have taken off and its senior lecturers would still be travelling visitors, and without the cultural amenities, the senior physicians of the Hospital would still be just visiting fellows in Be'er

Sheva. The harmonic interaction of all four institutions provided the conditions to convert the development town into the present bustling city.

[11] The statistical information of the present passage is drawn from the official computer output of the Central Bureau of Statistics on 1995 Census, analyzed through the "S.P.S.S. 10" statistical package.

[12] This argument, is set out in details by Adam Smith in the opening passage of Chapter 3, Book 1 in The Wealth of Nations (University Paperback edition) vol. I, pp.21-25. It has not lost its relevance in the last 225 years.

[13] Dafna Schwartz, The Impact of the Law for the Encouragement of Capital Investment on Industrial Investment in Development Towns. Rehovot, 1993. (Hebrew) see p. 230

[14] Jerusalem, Tel Aviv and Haifa.

[15] The Ben Gurion Airport.

[16] The ports of Haifa and Ashdod

[17] Lipshitz, op. cit., pp 80-81

[18] Schwartz, op.cit., p. 41

[19] ibid. ibid.

[20] The three "selective" towns are Elat, Karmiel and Arad. The "dependency ratio" "... is a demographic measure which expresses the proportion of the non-working population (under 20 and over 65 of age) and the working population (ages 21 - 64)" Efrat, op.cit., p. 145.

[21] Schwartz, op.cit., p.41