

Message from the Co-Executive Directors

There must be significant and immediate change

The year 2010 will be remembered as one of the most difficult in the history of Israeli society, and in particular the history of the Arab-Palestinian minority, because it was characterized by an increase in belligerence, racism, and exclusion by the establishment and public, of Arab citizens.

In addition is the establishment's legitimization of the views of the Yisrael Beiteinu party, due to the fact that it is a senior member of the coalition, and that party chairman Avigdor Lieberman is the foreign minister and deputy prime minister. This political legitimacy is being awarded to a party that espouses the denial of the legitimacy of the Arab citizens, raises proposals to restrict their rights, and repeatedly promotes the idea of a population exchange, with the goal of revoking their citizenship. The fact that a party with such extreme views plays a central part in the government is an anomaly in the democratic world, and attests to a serious deterioration in the government's attitude toward the Arab citizens. This deterioration is also evident within the government, where a large percentage of the cabinet has been affected by the plague of racism, hatred and exclusion in their attitude toward Arab society, as well as among the general public, where some people have escalated from expressing anti-Arab opinions to exercising anti-Arab behavior, such as the harassment of Arab students in Safed and the rabbis' call to the Jewish public not to sell and/or rent them apartments.

The past year was characterized by growing extremism in the Knesset, which turned into a main arena of anti-Arab activity. This was evident on two fronts: The first was an increase in the number of draft bills directed against Arab citizens, such as the approval on first reading of the Acceptance Committees Law for communal settlements, which enables the acceptance committees to reject candidates based on a series of criteria and is designed primarily to exclude Arab citizens, and a series of draft bills that link loyalty and citizenship, thereby in effect making citizenship conditional on a political viewpoint. The second aspect is an ongoing and consistent campaign of harassment, delegitimization of Arab MKs and denial of their political rights, which reached a peak in the physical attack against MK Hanin Zoabi of the Balad party in June 2010.

In addition to the behavior of the government and the Knesset, there has also been a deterioration in the attitudes of the Jewish public regarding the value of equality. The 2010 Israeli Democracy Index, which was published at the end of November 2010 by the Israel Democracy Institute, demonstrated a trend toward an increase in anti-Arab views. For example, 70 percent of the Jewish public are opposed to having Arab parties join the coalition and to the appointment of Arab ministers, 86 percent believe that crucial decisions should be made by a Jewish majority, and 62 percent believe that as

long as the State of Israel is in a state of conflict with the Palestinians, the opinions of the Arab citizens on subjects of foreign policy and defense should not be taken into consideration. And 55 percent said that they accept the idea that Israel should give larger budgets to Jewish communities than to Arab ones.

These are worrisome data, which are dangerous both for the status of Arab citizens and for the relations between the two populations. Not only are these viewpoints unacceptable to the Arab public, they are in contradiction of international law concerning the rights of indigenous peoples, according to which an indigenous national group must be granted individual and group rights, and has a right to live in its homeland together with all the citizens under a genuine egalitarian democratic regime. These findings should cause the decision makers and the Israeli public sleepless nights. They also point to a need for a profound educational process to achieve a change in values as well as a practical change.

But it is important to note that in Israeli society there is a struggle taking place between forces advocating equality and cooperation and voices calling for increasing inequality and discrimination. In the past year the former intensified their struggle in response to the strengthening of the latter. The forces promoting equality and cooperation are conducting a campaign against the anti-democratic trend, making their views heard firmly and consistently in the public arena and recruiting additional parts of Israeli society to this struggle.

Last October the Arab community marked the 10th anniversary of the events of October 2000 (the Al Aqsa intifada), during which 13 young Arabs were shot to death by the police. In spite of the long period of time that has passed, not a single indictment has been submitted against any of the shooters. On the contrary, the investigation files were closed by the attorney general. Recently we also marked seven years since the publication of the recommendations of the government commission of inquiry headed by Judge Theodor Or, which investigated these events. Although the recommendations, which called for guaranteeing the rights of the Arab community, were adopted by the government, most of them were not implemented.

We should recall that the events of October were not a one-time rift. On the contrary, for the Arab citizens this is an "ongoing rift" that continues from one event to the next and layer upon layer, day after day; it becomes stronger and escalates, accumulating frustration and bitterness, becoming more ramified and more complicated. Therefore the leaders of the country must deal with this conflicted situation forthrightly.

The Arab public, under the leadership of the High Follow-Up Committee for Arab citizen's of Israel, together with partners in Jewish society, is fighting against the government's discriminatory policy and against the racism and extremism toward the Arab public and its leaders. The Arab public is focusing its efforts and its messages on three central issues that trouble the Arab population and make things difficult for them: the policy of home demolition in general and in the Negev in particular, the persecution of the Arab political and public leadership, and the chronic and ongoing crisis in Arab local government.

This is not a good time to remain silent. The situation requires action, and anyone who fears for the existence of a democratic regime and for a shared and equal life in Israel has an obligation to take part in the process of change. We must all act to infuse morality and values into politics and the public discourse, and to develop clear practices for the battle against injustice and the promotion of equality and the establishment of democracy.

It should be noted that in March 2010 the government made a decision to allocate about NIS 800 million to 13 Arab local authorities in the context of a five-year plan that focuses on four areas: housing, employment and industrial zones, transportation and the prevention of violence. We believe that this decision and assigning responsibility for its implementation to the Authority for the Economic Development of the Arab, Druze and Circassian Sectors in the Prime Minister's Office, under the guidance of an Arab citizen, is an important step in the right direction. But it fails to provide a satisfactory solution to the needs of the Arab population, since it fails to include all the Arab citizens and all the policy areas in which there is serious discrimination in resource allocations.

Sikkuy has decided not only to keep track of the implementation of the plan, but also to actively help the local Arab councils and the Economic Development Authority, in order to increase the chances of the program's success and to lead to a genuine and visible change in the situation in the communities included in the program. We hope that by doing so we will prevent this program from joining a long list of previous government decisions and programs for promoting the economic wellbeing of Arab society, which were not implemented. At the same time we are urging the government to formulate a comprehensive program that meets the needs of the Arab population, to be formulated in cooperation with Arab experts and leaders and to include clear goals and targets, binding timetables and a guarantee of the necessary budgets.

In 2010 Sikkuy increased its activity in various ways to reduce the inequality between Arabs and Jews in Israel. The publication of Sikkuy's applied model, "From Barriers to Opportunities," constituted a significant milestone in our struggle to change the reality. The model outlines a method for the government and the Arab local authorities to identify barriers and to formulate political recommendations. We are also continuing to expand our activity in each of Sikkuy's six active projects vis a vis the government ministries, local government and the general public.

We hereby present the fourth Equality Index, which this year too was prepared by a large number of experts and team members. This is an objective professional index, based on scientific methodology. This year too, as in previous years, the index indicates that **the inequality between Jews and Arabs is increasing in almost every one of the areas we examined, as well as in the Weighted Index.** The findings of the index serve as warning signals for the destructive results of government policy, and the analyses and insights that accompany the data serve as a platform for changing this policy.

Sikkuy believes that joint activity of Arabs and Jews in Israel is an important tool for changing the situation. The staff of Sikkuy, the board of directors and all of the of the association's supporters –Arabs and Jews – are working hard and investing a sustained effort into changing the situation in Israel. We are working tirelessly to create a shared society, based on full equality for all the citizens of Israel. We believe

that the continuing discrimination, the gaps and an increase in the attacks against Arab citizens are not an act of fate but a call to action. We will continue to work until we see the desired change.

We would like to congratulate the staff of Sikkuy who worked on and contributed to the index. A special thanks to Alaa Hamdan and Yaser Awad, who invested a great deal of time and thought into improving the index, gathering the data, processing it and writing this report, and thanks to all the staff members who read and commented. We thank the members of the steering committee for developing the index: Prof. David Nahmias, Prof. Mohammad Haj Yihye, Prof. Yossi Yahav and Prof. Rassem Khamaisi, who accompanied the work of the staff members in completing the fourth index. We also thank the staff of content experts, who did not spare attention, comment and advice: Dr. Khaled Abu Asbah, Dr. Anat Ben Simon, Prof. John Gal, Dr. Nihaya Daoud, Dr. Ravit Hannanel, Mr. Mohammed Khatib, Prof. Rassem Khamaisi, Dr. Sami Miari, Dr. Shlomo Svirsky and Prof. Yossi Katan.

Sincerely

Ali Haider, Adv. and Ron Gerlitz

Co-Executive Directors

Abstract

Sikkuy, a shared organization of Jewish and Arab citizens of Israel that works to achieve full equality between Jewish and Arab citizens, has taken upon itself the civic responsibility for developing and presenting the Equality Index of Jewish and Arab citizens in Israel for the fourth consecutive year. The Equality Index is the product of the work of many well known experts in Israel, both Arabs and Jews, who contributed a great deal of their time and knowledge to develop this unique index. In the fourth year of the index we learn of a continued increase in the inequality between Arabs and Jews and a widening of the gaps between the two groups, to the detriment of the Arab population.

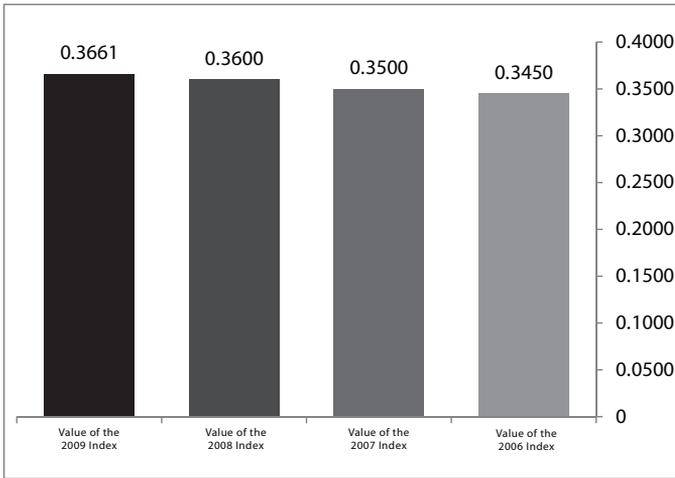
The Sikkuy Equality Index is the first aggregate index in Israel that systematically analyzes the gaps between the country's Jewish and Arab citizens. By means of the index we aspire to present as broad a comparison as possible between Jews and Arabs in various areas, subject of course to the limitations of the data at our disposal. The present index, like those published in previous years, focuses on the socio-economic aspect only and includes the following areas: Health, Housing, Education, Employment and Social Welfare.

In order to carry out a quantitative assessment of the level of equality between Jews and Arabs in each of the selected areas, with suitable integration of the indicators and variables, there is need of an aggregate index in which all the variables can be combined and weighted into one overall value. The aggregate index gives weight to each group in accordance with its share in the general population, and takes into account the degree of difference between the two population groups relative to each variable. The basic assumption is that under conditions of equality, the share of each group in the overall resource pie corresponds with its percentage in the general population. The five aggregate indexes are combined into one weighted index. The weight of each of the areas (health, housing, education, employment and social welfare) in the Weighted Index is determined in accordance with its share in the total national expenditure of all five areas combined.

The values of the index range from (-1) and (1). A value of zero indicates complete equality. A value tending towards 1 indicates inequality in favor of the Jewish population, and a value tending towards (-1) indicates inequality in favor of the Arab population.

The value of the weighted Equality Index for 2009 indicates an increase in the level of inequality between Jews and Arabs, in other words, a widening of the gap between the two populations to the detriment of the Arab population. The value of the 2009 Equality Index is 0.3661 – relatively higher than the 2008 index (which was 0.3600), the 2007 index (which was 0.3500) and the 2006 index (0.3450). In other words, between 2006 and 2009 there was a distressing increase of 6.1 percent in the overall Equality Index between Jews and Arabs (see diagram A).

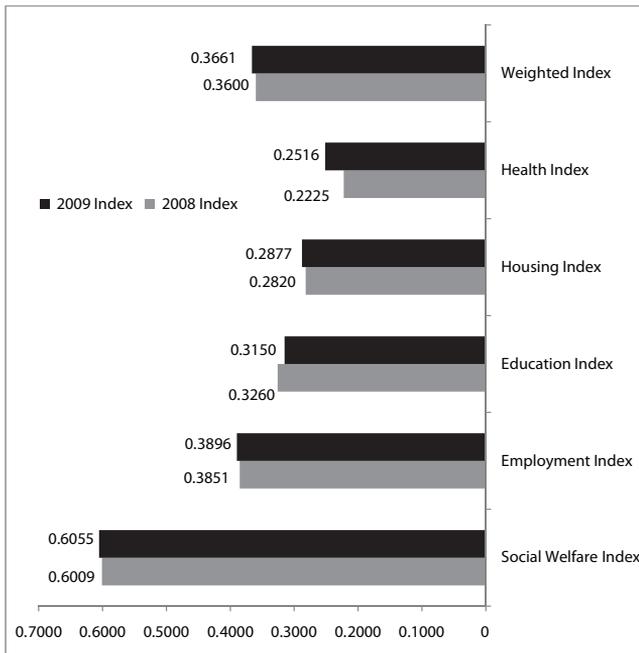
Diagram A: The values of the Weighted Indexes 2006–2009¹



Unfortunately, the present index attests to increasing inequality in four of the five areas examined (the exception is education), This continues the trend toward an increase in the gap, which has been evident since the preparation of the first index in 2006.

Below are the changes in the index between 2008 and 2009 by the various areas:

Diagram B: The values of the aggregate indexes in Health, Housing, Education, Employment and Social Welfare, and the Weighted Equality Indexes 2008–2009



¹ In order to enable a comparison between the 2006, 2007, 2008 and 2009 indexes, the base for calculation was merged with a variable average, so that the 2006 index was recalculated in the format of the 2007 index as follows: The calculation was done only for the Housing and Social Welfare Indexes (for which, beginning in 2006, there was a change in their base for calculation) for 2006 in the format of 2007. This was done by reducing the value of the 2007 Index in these areas by the percentage of the increase in these indexes between the 2006 Index and the 2007 Index in the 2006 format.

Health

The value of the 2009 Health Index is the lowest of all five indexes. However, this is the fourth year in which we see an increase in its value, which indicates the widening of the gap in favor of the Jewish population. The 2009 Health Index is 0.2516, as compared to 0.225 in 2008, 0.2108 in 2007 and 0.2076 in 2006. These findings indicate deterioration in the situation, in other words **an increase of about 21 percent in the inequality in the area of health** beginning in 2006, to the detriment of the Arab population.

Housing

The value of the Housing Index for 2008 is significantly higher than in previous years, and is 0.2877 as compared to 0.2820 in 2008 i, 0.2706 in 2007 and 0.2678 in 2006.² These findings attest to a deterioration in the situation and to the fact that since 2006 the **inequality between Arabs and Jews in the area of housing increased by about 7.4 percent** to the detriment of the Arab population.

Education

The value of the 2009 Education Index indicates a decline in recent years. 0.3150 as compared to 0.3260 in 2008, 0.3413 in 2007 and 0.3420 in 2006. These findings indicate **a decline of about 7.8 percent in the inequality between Arabs and Jews beginning in 2006.**

Employment

The value of the 2009 Employment Index indicates an increase: 0.3896 as compared to 0.3851 in 2008 and 0.3705 in 2007 – an increase of about 5.1 percent. That is as compared to a decline of about 4.7 percent between 2006 and 2007, from 0.3882 to 0.3705. **The general trend indicates a slight increase in the Employment Index.**

Social Welfare

The 2009 Social Welfare Index is the highest of all the aggregate indexes, and this year is 0.6055 as compared to 0.6009 in 2008, 0.5595 in 2007 and 0.5386 in 2006.³ This is the fourth consecutive year in which the Social Welfare Index has increased, in other words the gaps between Arabs and Jews are widening in favor of the Jewish population. **There was a steep increase of 12.4 percent between 2006 and 2009.**

Summary

The 2009 Equality Index presents a harsh picture to the Israeli public and decision makers. The inequality between Jews and Arabs stems from the gap between the government inputs and the bottom-line outcomes of government policy over time for Arabs and Jews – in other words, the results of the level of implementation⁴ of this policy.

2 See footnote 1.

3 See footnote 1.

4 The level of implementation is reflected in the value of the variables in the index, whether they are variables that reflect direct investment (such as the budget for welfare offices, teaching manpower, etc.) or whether they are variables that reflect output (such as level of education, poverty, employment etc.)

This gap is reflected in the following areas:

- **Health:** The level of government implementation for a single Jew is same as for 1.28 Arabs in the 2008 index and for 1.33 Arabs in the 2009 index.
- **Housing:** The level of government implementation for a single Jew is the same as for 1.39 Arabs in the 2008 index and for 1.40 Arabs in the 2009 index.
- **Education:** The level of government implementation for a single Jew is same as for 1.48 Arabs in the 2008 index and for 1.46 Arabs in the 2009 index.
- **Employment:** The level of government implementation for a single Jew is same as for 1.62 Arabs in the 2008 index and for 1.64 Arabs in the 2009 index.
- **Social Welfare:** The level of government implementation for a single Jew is same as for 2.50 Arabs in the 2008 index and for 2.53 Arabs in the 2009 index.

Overall, the level of government implementation for a single Jew is same as for 1.56 Arabs in the 2008 index and for 1.58 Arabs in the 2009 index.

At the end of four years of keeping track, the results of this index unfortunately indicate an increase in inequality between Arab and Jewish citizens for the fourth consecutive year. In the past year inequality increased in every area except education. The picture provided by these data is cause for concern and should constitute a warning signal to the decision makers and the general public. We call on the government to act with urgency to narrow the gaps.

2009 Equality Index

Introduction and Explanation

The value of equality stems from the basic assumption that the value of life is a common denominator for all human beings, which endows them with a natural right to live in dignity. The right to live in dignity is the right of every person, regardless of differences such as wealth, ethnic origin, nationality, religious belief, gender, sexual proclivity, heredity, health and culture. However, that same basic human right to live in dignity requires a consideration of all the components of differences among people. People are born into various life circumstances, and their degree of control over their lives depends on these circumstances. Therefore, implementing basic rights requires attention to the sum total of resources at the disposal of society and to the way in which these resources are allocated among its members.⁵

The vital importance of equality as a human value stems from both moral-ethical and utilitarian considerations. From the moral-ethical aspect equality is seen as a natural right of all the individuals and groups in society. From the utilitarian aspect, equality is a basic condition for a democratic regime. Moreover, it is a crucial means of advancing the level of human ability and performance in the various spheres, such as economics, education and health. Studies have shown that discrimination and profound economic and social gaps undermine achievements in all areas.⁶ Moreover, equality is vital for consolidating and maintaining the social consensus, while a sense of deprivation erodes social stability and solidarity.⁷

The commitment of countries and organizations to the principle of equality, as one of the values to be taken into account when making decisions and formulating policy, has led to an increasing need for means of supervision and follow-up of the state of equality between individuals and various groups in the population. The United Nations developed the Human Development Indexes, which assess the gaps in the level of human development between countries. In the United States the National Urban League initiated an equality index between blacks and whites. The European Union has been working on a gender equality index, and in the wake of the increase in immigration they are now developing a European Inclusion Index, which enables a follow-up of immigration policies in the various European countries.

The Equality Index between Jews and Arabs is the first aggregate index in Israel that systematically analyzes the gaps between its Jewish and Arab citizens. By means of the index we aspire to present as broad a picture as possible of the state of civic equality between Jews and Arabs in Israel in the three primary components of citizenship: legal,

⁵ Edward N. Zalta (Ed.) *Stanford Encyclopedia of Philosophy*, Stanford CA: Center for the Study of Language and Information, Stanford University, 1998.

⁶ United Nations Development Programme, "Inequality and Human Development," Human Development Report, 2005.

⁷ Report of the State Commission of Inquiry into the October 2000 clashes between the security forces and Israeli citizens. Jerusalem: September 2003, p. 43

political and socioeconomic equality, within the limitations of the data at our disposal. At present the index focuses on the socioeconomic aspect only, serving as a tool to compare Jews and Arabs in the areas of health, housing, education, employment and social welfare.

In order to make a quantitative assessment of the level of equality between Jews and Arabs in each of the selected areas, while properly integrating the indicators and the variables, we created an aggregate index, which enables us to combine all the variables into one overall value. The index gives weight to each population group in accordance with its percentage in the general population, and takes into account the degree of difference between the two groups relative to each variable. In other words, the basic assumption is that in conditions of equality, the share of each group in the overall pie of resources is commensurate with its percentage in the general population. The five aggregate indexes are combined into one Weighted Index, in which the weight of each area (health, housing, education, employment and social welfare) was determined by the percentage of each area in the total national expenditure on all five.

Aims of the index

The Equality Index is designed to serve four main purposes:

- To serve as a tool for tracking government policy and its results.
- To monitor the state of the gaps between Jews and Arabs in a given time period and over a period of time.
- To influence public opinion by raising awareness, and to promote commitment to equality.
- To determine goals for closing the gaps between the two population groups.

The target audiences

The two principal target audiences of the index are government institutions and the general public. In addition to keeping track of government institutions and putting pressure on them, we need to deepen public awareness of the destructive results of discrimination and inequality, and to empower the populations that suffer from discrimination, so that they will be able to protect themselves from it more effectively.

Uses of the index

The index serves as a tool for diagnosing and pinpointing situations of inequality, for measuring the extent of inequality, and for monitoring progress or regression in the state of equality over time. In later stages we will be able, by means of the index, to point to possible links among variables on the one hand and results in the field on the other.

Population examined by the index

Most of the data in the index come from the Central Bureau of Statistics (heretofore the CBS), which publishes its data in three categories of population groups:

1. Arabs who are citizens of the State of Israel and residents of East Jerusalem.
2. Jews who are citizens of the State of Israel;
3. others, i.e. citizens of the State of Israel who are neither Jews nor Arabs. The Equality Index relates to two groups: Arabs and Jews. The first category includes all Arabs who

are Israeli citizens, including residents of East Jerusalem⁸, while the latter is composed of Jews and others – non-Arab members of other faiths.

Data sources for the index

The data on which the equality index is based are taken from off-the-shelf data, which are published by the CBS, the National Insurance Institute and government websites, as well as from data provided to us by the Freedom of Information departments in the various government ministries.

The quality of the index's findings depends largely on the number and quality of variables it includes. We hope that the database produced for us by the government ministries will eventually grow, so that we will be able to elaborate on the picture portrayed by the index, and through it to provide a better and clearer reflection of obstacles to equality and opportunities for advancing it.

Indicators and variables

The Equality Index, with its five areas, comprises 16 indicators and 96 variables. We aspire to include in the index indicators and variables on which there is as broad a consensus as possible, and to reflect the situation as accurately as possible. The indicators and variables that were chosen are based on various research units (individuals, families, populations groups, geographical region etc.), and through them we can reflect social, economic and political goals.⁹ In addition, they can be used as criteria for necessary policy changes. The index variables can be grouped into various categories to enable an analysis of the present situation in various dimensions and aspects (for example, variables that describe inputs and those that describe outputs).

The Equality Index is a growing and developing index, and therefore our goal is to expand the number of variables and indicators included in it. Nevertheless, we are aware of the fact that changes in the array of indicators and variables undermine the continuity of the index. Therefore, changes with far-reaching implications for the value and continuity of the index will be introduced only every few years. This year we did not change the array of indicators and variables relative to the 2008 index. Therefore the comparison is unambiguous.

Range of index entries

The range of the index entries varies from (-1) and (1). A value of zero indicates absolute equality. When the value of the index moves toward 1, it indicates inequality in favor of the Jewish population, and when it moves toward (-1), it indicates inequality in favor of the Arab population.

Mathematical presentation

Each variable is represented by the average over five years, which is denoted by C_i , with i indicating a given variable out of n different variables. Every C_i vector has C_j components, with j indicating a given population out of m various sub-populations (in our case, m=2, Jews and Arabs).

⁸ In many of its measurements the Israeli CBS does not differentiate between Arab citizens of Israel and East Jerusalem residents.

⁹ See Table of Indicators and Variables, pp 90–93.

An average value for each variable i can be calculated for the total population (which will be denoted by m_i), in the following manner:

$$m_i = \sum_{j=1}^m p_j c_{ij}$$

While P_j represents the weighted coefficient for population j , also $\sum_{j=1}^m p_j = 1$

In order to aggregate different variables with different measures units, we standardized the vector c_i into new vector called N_i , thus $N_{ij} = p_j c_{ij} / m_i$

Therefore, for every i we produced a dummy variable, such as $\sum_{j=1}^m N_{ij} = 1$ with

$\bar{N}_i = \sum_{j=1}^m N_{ij}$ and $S_i = (\bar{N}_i * (1 - \bar{N}_i))^{0.5}$ denote the mean and the standard deviation

of the variable respectively.

Define a vector such that $IND_j = \sum_{i=1}^n \frac{(N_i / S_i)}{(P_j / S_i)}$

We calculate the integral index for each sub-population, relating to the area being studied, which will be marked IND_j as a weighted total of the adjusted vector of variables for that sub-population (N_i), which the weight given to the variable in the index is the opposite of the standard deviation S_i . The expression with the formula IND_j is analogous to the ration between observation and expectation.

The index IND_j was calculated for each sub-population separately, and we have created a new relative index that is the ratio between the difference between the index of the two sub-populations divided by the maximum value of the index between the two sub-populations, and marked index.

In our case there are two populations, Jews and Arabs, and therefore $j=1,2$. The index is defined as:

$$index = \frac{IND_1 - IND_2}{Max(IND_1, IND_2)}$$

The $Max(...)$ function expresses the completion (the transfer) that must be implemented in expressing the denominator in order to reach equality for the sub-population that received less than the share it deserves according to its relative share in the general population.

It should be mentioned that in order to preserve the uniformity of the effect of the change in the values of the average of the variable being studies, the variables in the analysis were classified according to the way they influence the direction of the values of the index. For some variables, the higher their average value, the more positive an influence they have on the situation of the sub-population. On the other hand, for other variables, the higher their average value the more negative their influence on the situation of the subgroup (inverse ratio). For example, in the area of education, when

the average number of children in a class drops, the situation of the sub-population improves. These variables have undergone a transformation and are listed in their opposite value (1 divided by the variable average). The other variables are presented without change.

Characteristics of the index

- The index has statistical traits that are common in indexes of this type.
- The index is characterized by an ability to predict the changes in the state of equality/inequality.
- The value of the parameter of weighting in the index formula is of great importance. Therefore there is a need to determine a significant value (there can be a different value for various indicators and variables) that expresses policy and/or genuine distribution, or alternatively as proportions between two population groups. When the weighting parameter is uniform and fixed for all the variables, the change in the degree of equality between the two populations is a result of changes in the values of the variables only. When there is a change both in the weighting parameter and in the values of the variables, the intensity of the change and the ratio between them will affect the degree of equality. Various values can be used for the weighting parameter for various variables, while of course maintaining the relevant significance of the suggested weighting.
- The closer to identical the distribution in the sense of equality of equality between a first moment (average) and a second moment (difference) between the two populations, the more the value of the index approaches zero (i.e. equality).
- The index takes into account not only the value of the adjusted variable i of one population group, but also the distance between the adjusted variable i in one population and the adjusted variable i in the second population group.
- The index is a function of the weighting parameter, its share in the space, with the exception of the extremes (in the extremes the value of the index approaches zero, because there is no assumption of the existence of two population groups).
- Given the form of distribution of the variables in populations m and m' , and assuming that the distribution of variables in populations m and m' is not identical in the sense of a first and second moment, then there is a' value for the weighting parameter a , for which $\text{index}=0$ (total equality). When $a' \geq a \geq 0$ and a converges to a' then index converges to total inequality. On the other hand, when $a' < a \leq 1$ and a converges to 1 the index converges to total equality. This trait indicates that even if the gap between the two population groups is large, there is a range of the weighting parameter such as $[a', 0]$ in which the index converges to equality in spite of the overrepresentation of the sub-population, and that guarantees a given level of inequality in light of the indicators in the analysis.

The Weighted Index

The Weighted Index sums up the five aggregate indexes and expresses the distance of both population groups from the point of equality. Each of the aggregate indexes is weighted in accordance with the relative weight of each of the five areas in national expenditure. The rationale of weighting the national expenditure stems from the fact that it includes the total public expenditure (government, local government, non-profit associations), in accordance with national policy and order of priorities, and the total private expenditure (households and individuals) in the various spheres in accordance with their ability and preferences. The sum of the combinations of the product of the

index values in the five spheres in the percentages of national expenditure represents the final difference between government and household allocations on the one hand and actual resources on the other.

Method of calculation

The index value was calculated with the Excel macro system, in order to carry out simulations of the sensitivity of the value of the aggregate index to a change in values. For example, we examined the sensitivity of the index to changes both in the weighting parameter and in the values of the variables and the various indicators among the two populations in each of the spheres.