

The Evaluation of Qard-al-Hasan as a Microfinance Approach in Poverty Alleviation Programs

(Case study of Iran.I.R.)

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Abstract

Different countries have implemented various methods in their poverty elimination programs. Redistribution policies, financing low income groups, subsidizing, enhancing the capabilities of the poor, and... are among the traditional policies for poverty elimination programs.

The study of concept of poverty is always one of the most important considerations in Islamic thoughts. Islamic Shariat with special consideration of economic poverty roots and causes has introduced numerous bases and tools to cope with this sinister phenomenon in

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Islamic societies. Ihsan, zakat or alms, Waqf and Qard-al-Hasan are part of principles and economic behaviors of Muslims which have considerable positive effects on poverty elimination in these societies.

By emphasizing on Qard-al-Hasan as a means of microfinance in the banking system and Islamic Shariat in order to finance the poor in accordance with modern financing tools, this paper will evaluate the effects and results of the application of interest-free loans in poverty elimination programs in Iran I.R.

Accordingly, by compiling data of 28 provinces of the country during 1996-2003, the effects of providing interest-free loans on per-capita income as a proxy variable for poverty elimination indicator will be analyzed and evaluated.

Introduction:

The Islamic economic system is the outcome of the thoughtful and dynamic Islamic school of thought, which tries to range the physical needs of the society in accordance with moral values to make human being free of need in the path to perfection and elevation by using a collection of rules, regulations and related institutions. Poverty alleviation and the creation of the necessary background to ensure the basic needs of human society is regarded as one of the main programs to fulfill one of the high ranking goals of this holly system, namely the establishment of social and economic justice in the society.

Poverty alleviation programs have been introduced as one of the main axis in the economic programs of the developing countries in the past two decades, but many of them had not a good experience in this regard. The widening gap between classes and the increasing number and the percentage of poor are the outstanding manifest of this phenomenon. This has led to consider poverty as a granted social norm in most of these countries.

The Islamic countries as a part of developing countries are not exempted from this process and today poverty is regarded as one of the main problems facing these countries, and poverty alleviation has become one of the main challenges in their economic system.

Poverty and poverty alleviation strategies from Islamic point of view

Islam considers poverty as a dangerous social problem which challenges human being to lose faith and threatens his identity. Poverty is a potential threaten for peace and stability of society and the purpose and the aims of shariah is to save the faith, soul, generation, property and thoughts of human being. These goals necessitate securing the important needs of human being such as food, clothing, dwelling and marriage, so that there are no probability of deviating from religion and moral boundaries. Islam orders the government and the society to share the

responsibility of poverty alleviation from the society and Quran and Sunnat of Prophet Mohammad (peace be upon him) which have been delivered through inspiration for all the times and places, have assigned the tools and methods of fulfillment of this responsibility. The first aim of Islamic economic philosophy is the alleviation of poverty by satisfying the main needs of human being, decreasing the gap between poor and rich, and to develop the physical potentialities for elevation of welfare of human society. To do this, regarding the basics of economic philosophy, Islam has introduced several strategies and tools for solving the problem of poverty. To be mentioned, Zakat, Ihsan, Sadaqah, Waqf and Qard-al-Hasan are some of these tools. Therefore, the institutionalized Islamic governments are expected by emphasizing on these subjects and giving priority to poverty alleviation in their economic and financial strategies and providing sources, support and necessary economic chances, to implement social justice and proper distribution of wealth and to reduce the gap between poor and rich.

The poverty level in Islamic world

The picture presented by international organizations for the level of poverty and human development represents Islamic world amongst the most back warded nations. All studies indicate that poverty widespread prevail in most African Sub-Sahara and South Asian countries. If we consider the 52 members of Islamic Conference Organization as the representatives of Islamic world, we realize that among them, 25 countries are amongst 56 very poor listed countries of African Sub-Sahara and South Asian countries. The attached table shows the position of the members of Islamic Conference Organization in the order of human development, and the life expectancy, literacy rate of the youth, child education and per capita income. This table represents the prevalence of poverty and deprivation in Islamic world. Only Broney is among the top 50 countries which have the lowest number of population in Islamic word, and there are 23 Islamic countries amongst the lowest countries from human development point of view, 11 of which are amongst the poorest countries of the world. Although the data on Islamic countries are not

complete for some Islamic countries, the human development report of 1994 estimates that there are 185 million people (26 percent) living in member countries of Islamic Conference Organization who live in absolute poverty. Since this data is not complete for all countries, perhaps the complete picture may be worse. Therefore, it seems the poverty in Islamic world, especially in African Sub-Sahara and South Asian countries will remain high for several years.

The studies conducted in Iran confirm this. One study in 1996 shows that according to the defined indicators, 17 percent of the people of the country are poor which 60 percent of them live in urban areas. Statistics show that the implementation of poverty alleviation programs during 1992-2000 have had good results in decreasing poverty in the country. For example, the total amount of poverty in urban and rural areas of the country has decreased from 0.132 and 0.165 in 1992 to 0.012 and 0.048 in 2000 respectively¹. Among these programs and policies, we can mention the banking and credit policies for financing the poor, which effectiveness have been emphasized in this paper.

The relationship between social justice, providing basic needs and poverty

In general, the implementation of social justice can be achieved through the decrease of physical and inequality of income distribution. The decrease of inequalities and more justified distribution of income can be achieved more easily through mechanisms at macro level. Suitable policies for achieving social justice through application of a package, in which all subjects and axes have close relationship, will make the fulfillment of the goals much easier. Here the point is that in applying equality in distribution of income, people in different groups and regions do not gain equally; therefore, which causes the achievement of social justice with lags. But if during this process poor people gain enough, we can claim that the fulfillment of the social justice has obtained a better

¹- According to Sen Index.

pace.

Charts 1 and 2 show the process of decreasing physical and income inequality and their relation with basic needs of the society. As it can be seen, the achievement of social justice needs a process which causes the increase of just distribution of income, welfare, health and educational facilities, decreases class inequality and increases the efficiency. Therefore, we cannot say that social justice is a last point, but it is a circular process in the time and elevates in relation with the prevailing conditions.

In this process, facilities and resources will be more available for the poor for the fulfillment of social justice. One of these facilities is the availability of credit and financial resources for their basic needs, or financing their economic activities. Since the poor may not be capable for conducting large activities, the global macroeconomic policies persuade cheap financing the low income people which has proved to be very efficient in poverty alleviation. In this context, the policy of governments, public institutions and even non-government organizations is to enable the poor and furnish them with infrastructure for starting their business.

Chart 1: The decreasing flow of physical inequality and a more balanced income distribution: (to achieve social justice)

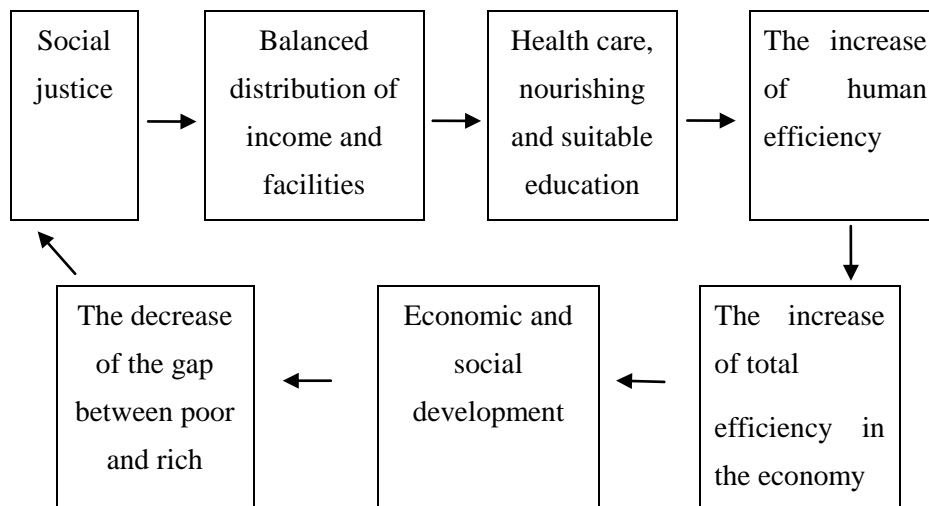
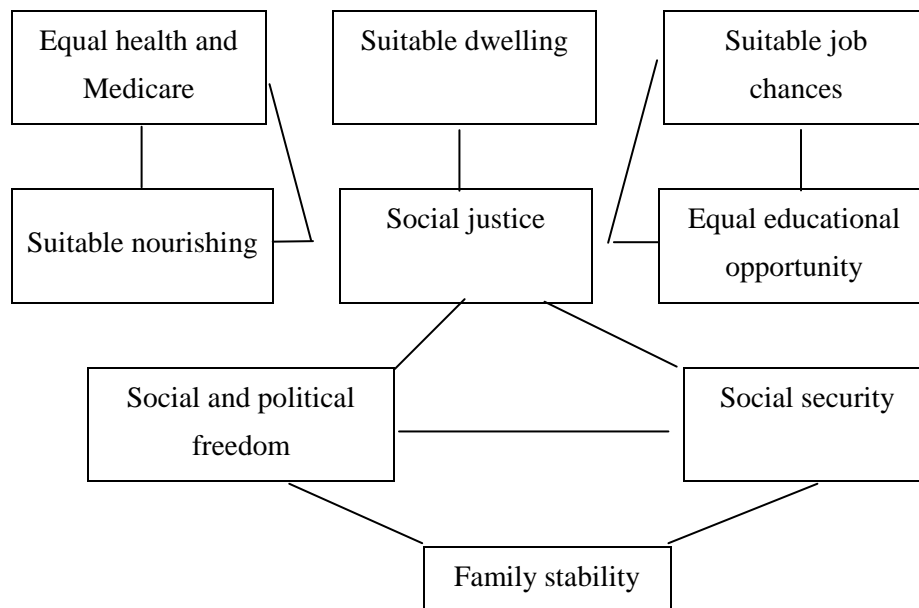


Chart 2: The relationship between social justice and provision of basic needs



The interaction between microfinance, poverty alleviation and social justice

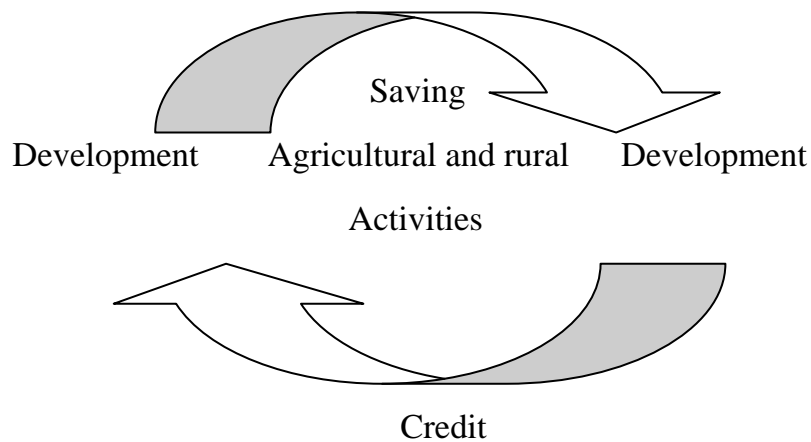
In social justice discussion it was mentioned that the equality in chances and opportunities has an important role in decreasing unjust distribution of facilities and sources. One of the important tools for achieving this task for a special group (poor and low income group) which governments emphasize is micro credit program.

These programs, with the aim of improvement of social environment, decrease of unemployment and creation of new job opportunities in the form of entrepreneurship and self employment, elimination of social inequality and decrease of poverty in urban and rural areas and also to increase women participation in labor market have been adopted in many countries around the world and for this end, microfinance institutions (MFI) have been developed. These institutions have coverage of 10

million families in developing and developed countries¹. These small credits can cause to create new small businesses by a rural woman or by inhabitant in a medium size city and in addition to job creation; by development of investment and saving, will change the economic condition of the family.

The main point is that in microfinance program, the concept of employment and poverty reduction has an important role. This is because in all credit programs with the aim of long lasting stability of family income of low income and poor families, the creation of employment (in the form of self employment or else), is considered through microfinance. Therefore, there is a close relationship between micro credits, employment, poverty alleviation and reduction of inequalities. The allocation of micro credits through defined methods and by special agencies for this job is for creation of a new small business or development of existing ones if this finance creates at least one job opportunity for the new business, or decreases production costs for the existing ones.

Chart 3: The relationship between credit and saving in the process of financial resources for rural development



¹- Gomez R. and Senator E. (2003).

Source: Seibel (2001)

Therefore, it should be mentioned that financing provide social services and finance (saving, loan, insurance and money transaction and payment) which enhance social capital that increases the efficiency of flow of funds for social justice specially for low income and poor families.

A review of successful micro credits policy in poverty alleviation programs

It is expected that by financing the low income and poor groups, they will be capable of financing themselves and cope with capital shortages in the process of economic activities and making themselves more capable. Therefore, financing them through providing credit and finance can have a major role in their economic life and solving their problems. The existence of hidden expenses, bureaucracy, disability of official sector in responding their needs, are among the most important factors for the need of activities of microfinance institutions in economic programs for alleviation of the problems of this group and they have had a very successful application in poverty alleviation programs in developing countries during the past two decades. In this context, 5 countries will be reviewed:

1- Bangladesh

This country can be considered as pioneer in microfinance. The experiences of this country in providing financial resources for small firms, poor, special groups, especially women has caused countries who select microfinance strategy to consider the experience of Bangladesh, specially the success of Grameen Bank. In order to evaluate the performance and the quality of financial services micro finance institutions in Bangladesh, we can refer to institutions or plans such as Grameen Bank, Bangladesh Rural Advancement Committee, 12 Rural Development Project, Bangladesh Reconstruction Bureau, Shakti

Foundation, Rangipour Dinajpur Rural Services and the Development Plan of Agricultural and Marginal and Small Systems Corporation International Project.

Although the goals of these institutions are different, but their main concern is to protect the poor and enable them for economic activities to obtain a minimum acceptable income. For example, a special service of these institutions is to provide small loans for poor women which can be paid back in weekly installments within one year. Therefore the main aim of these institutions is the improvement of conditions of poor rural people through their access to credits, savings, facilities and some non financial social programs. The main concern of these institutions, especially Grameen Bank is on the gathering together and concentration of lower social class who have no collaterals, and providing them with small loans which are mutually guaranteed by all members of the group who are obliged to make saving to pay back the loan, if each member of the group wants to obtain loan in the future, payments depend on the ability of the group in paying back the loan.

In order to decrease the dependency on subsidies, Grameen Bank charges a rather high rate of interest. Usually the evaluation of cost-benefit of interest rate is an effective way to reduce dependency on subsidy for a rural financial institution (or person). This extra charge is a source for existence and development of providing loan, because the scarce resources will be available for more people. The experience of Bangladesh in application of policies and methods in implementing microfinance projects not only had successful role in poverty alleviation in low income regions especially rural areas, but also the understanding of especial social and economic features of the rural and low income areas had a grate help for further development and implementation of these plans.

2- Malaysia

By implementation of new economic programs in Malaysia during 1985-95, in spite of the spread of poverty in rural areas, the poverty rate

decreased from 45 percent to 15 percent. This was caused by microfinance institutions to some extent. Some of the non governmental institutions in Malaysia which were working under a syndicate are: The Plan for Testing Grameen Bank Method for Poverty Alleviation of North-West Region, or Amanad Inkhtiar Malaysia (AIM)¹, Yayasan Usha Maju (YUM) and KKR (in the form of credit cooperative as a social club for the youth). The AIM plan is the largest microfinance institution in Malaysia with poverty alleviation aim. The two important factors in the development of financing the poor are the full support of the government and the application of practical guidelines of Grameen Bank. The experience of payment system of micro credit by non-governmental institutions in Malaysia shows that like Grameen Bank, the poor people are divided into groups which supervise the proposed loan, its costs, and the borrower and micro problems and general welfare of the members of the group. It is interesting that these loans have no collaterals, guarantors, interest, or legal prosecution.

The studies show that most of micro finance institutions in Malaysia are not self sufficient, that is to say that their commission income do not cover their costs. Regarding the Islamic principles prevailing in the country, AIM institution does not receive any interest. But they are dependent on government and non-government grants and that is why they are not self sufficient. Meanwhile, the coverage of the poor in the rural areas of Malaysia for micro credit is expanding and the increasing growth of the economy will decrease the number of the poor in the country, and the poor and low income people will be engaged in small firms, or self employment, or temporary and part-time jobs in the framework of small projects.

3- Jamaica

¹- Ali Hassanzadeh, Ali Arshadi. (2003). "The role of micro credit in rural development", Presented in the 13th annual conference on monetary and exchange policies-Tehran, Iran (I.R.).

In this country a joint program in the framework of providing small loans for starting self employment activities in the form of groups of people accepting the repayment of the loan was planned to create employment by small firms in the official sector of the economy, especially in modern sector of Jamaica in 1985. Under this program, loan was given to unemployed young people to start a business, while training programs and preferential plans were introduced to them.

There were different criteria for approving priority projects, the more important of which were the applicability of the project and the availability of a credible guarantor. This program was almost carried out in agricultural and comerece sectors (sale and distribution). The experience of this program shows that most of the people engaged in this program were women and young people who used the credits for developing their business. But studies show that the program was not successful which was mainly due to the absence of good supervision of the credits given, the lack of capability and expertise and the need for experienced labor force, the poor recognition of the people and their ability to pay back the loans.

4- India

Before financial reform programs (1990-99), giving credit to the poor was through subsidies. This was the view of many bankers, but deregulation change the view of the financial system. For example, the liberalization of interest rate caused many banks, with the support of National Agricultural and Rural Development Bank (Koopervasi Kredit Rakyat), create links with unofficial groups who helped the poor, to mobiles savings and provide loans with reasonable rates.

The financial reform was a part of structural adjustment policies which was started by the government in 1990 to accelerate the economic growth and improve the bad living conditions (poverty alleviation program) in which the government used subsidies as the main nucleus of its activities in poverty alleviation programs. One of the largest poverty alleviation programs in the world was the Integrated Rural Development Program

which covered more than 45 million people. In this program, the increase of income of the loan users was through training the rural youth for self employment and improvement of the women and children conditions.

The implementation of the above program for poverty eradication in rural areas and providing loans with reasonable rates by National Agricultural and Rural Development Bank caused the formation of helping groups which had an important role in decreasing operational costs, and the continuation of self sufficiency of the micro finance institutions. One of the reasons for this is the increase of saving absorption (fund raising) by these institutions. The self- helping groups also help micro finance institutions to extend more loans and other facilities.

5- Nepal

Nepal is a poor country which needs economic reconstruction. One of the economic reconstruction needed is financial reconstruction for targeted support for the poor and especial groups. Regarding the lack of success for micro finance institutions in the country, the circumstances or the flourish of unofficial institutions is ready. At present time, concentrated saving and credit groups are active in rural areas. It seems that the help of these unofficial groups has a better coverage of official ones. Some of the most famous poverty alleviation programs are: National Bank for Agricultural and Rural Development (NABARD) and Integrated Rural Development Program (IRDO) with 85 thousand loan takers of rural women.

Most of micro finance institutions in Nepal are not self sufficient and this has limited the power of providing loan for the poor. To some extent it is because the average interest rate of loans is below 18 percent and the Central Bank of Nepal has defined the maximum rate of spread as 6 percent. Moreover, instant credit is prevailing in the country so that commercial banks are obliged to allocate 12 percent of their loan portfolio to priority sectors defined by government such as agricultural, rural construction and service sector.

Qard-Al-Hassan, the Micro Finance Strategy in Islamic Countries

Qard-Al-Hassan (interest-free loan) is a kind of loan. Although Qard-Al-Hassan is discussed under the title of “loan” in legal and fiqhi discussions, but its fulfillment has special conditions which distinguishes it from other loans. These conditions includes: the borrower should be needy and the lender should have spiritual incentives for lending. By inducing spiritual incentives, the rich Islamic culture tries to adjust the materialist behavior of human being to satisfy economic needs. The improvement and expansion of Qard-Al-Hassan in Islamic society means the movement towards the implementation of one of the most important aims of Islamic economic system which is the answering the material needs of the people and alleviate poverty from Islamic society.

The applications, tools and methods of providing and mobilizing the necessary funds and lending according to Qard-Al-Hassan contract are the reasons that places this kind of loan in micro credit category in the credit system of Iran. Therefore, in order to have a better understanding of this similarity, we will explain here the tools and methods of providing this kind of loan in the monetary system of Iran.

- a) Domain: The domain of this loan in Iran includes the provision of the needs of families such as home repair and dwelling, helping to pay educational expenses, payment of medicare expenses, providing marriage expenses and other necessary loans from consumption point of view, providing the necessary capital and work tools for the low income families, revolving capital for small production firms and even providing the needs of those people who have suffered from unexpected natural disasters.
- b) Conditions for granting Qard-Al-Hassan: These include the ceiling, terms of repayment and commission and guarantees which are methods of micro financing.

The maximum ceiling of this loan for expenses such as marriage,

medicare and even for providing work tools for low income families is 5 million Rials (\$555), for dwelling and home repair, education and even starting a small business is 30 million Rials (\$3333).

The grace of consumption Qard-Al-Hassan is one month to three years, and production loans is up to five years.

The commission of Qard-Al-Hassan is 2.5 to 4.0 percent.

According to the article No. 15 of Usury-free Banking Law, Qard-Al-Hassan does not need any collaterals and guarantees, and its contract is considered as a legal and binding document is under the operational regulations concerning the legal documents.

A review of the performance of Qard-Al-Hassan in Iran

Qard-Al-Hassan is an important source of providing loan for low income groups of the society in the framework of banking system of the country, as well as in Qard-Al-Hassan funds. Organizing and making this credit sector more aiming, can create the necessary structure and background for the development of poverty alleviation programs through planning and implementing micro credit projects in the country.

The statistical performance of Qard-Al-Hassan paid by the banking system of the country in 1984 showed that about 7.5 percent of the total facilities and credit (337.6 milliard Rials) were paid to the low income families of urban and rural areas. This kind of loan, with an average rate of 15 percent increased to 849.2 milliard Rials in 1992. Regarding the rapid rate of growth of the country and expansionary monetary policies of the country after 1992, the average rate of growth of Qard-Al-Hassan increased to 40 percent and the amount of this loan reached to 26543.8 Billion Rials in 2003. Since the ceiling of this loan was not changed during these years, we can conclude that the number and coverage of this loan have had an acceptable growth in 20 years.

Keeping in mind, we can conclude that the increase of the income of low income groups of the country has been affected by providing them with necessary background and tools through cheap capital resources.

Poverty indices Gini Coefficient and the ratio of income of 10 percent higher income families to the income of the 10 percent lowest income families show the partial improvement of living conditions of the society and poverty decrease during this period. The Gini Coefficient has decreased from 0.453 in 1984 to 0.3996 in 2004, and the above mentioned percentile ratio has decreased from 24.8 in 1983 to 14.4 in 2003 confirms that income condition of the population, especially low income groups have improved.

Table No. 1- The performance of Qard-Al-Hassan loans and credit system in Iran

Qard-Al-Hassan			
Year	Milliard Rials	Growth (%)	The ratio of Qard-Al-Hassan to total facilities
1984	337.6	Na	7.5
1985	335.4	-.65	6.6
1986	641.5	91.26	11.5
1987	666.6	3.91	10.5
1988	718.0	7.71	9.6
1989	717.6	-0.06	7.4
1990	749.9	4.50	5.7
1991	750.2	0.04	4.1
1992	849.2	13.20	3.6
1993	1257.2	48.05	4.6
1994	1453.1	15.58	4.4
1995	1925.5	32.51	4.7
1996	2398.8	24.58	4.5
1997	2866.8	19.51	4.6
1998	4203.7	46.63	5.0
1999	5908.0	40.54	4.6

2000	7177.5	21.49	4.2
2001	10410.9	45.05	4.5
2002	23097.3	121.86	7.2
2003	26543.8	14.92	6.0

Source: The balance sheets of banking network of Iran (I.R.).

Table No. 2- The trend of changes in Gini Coefficient in Iran

Year	Coefficient
1984	0.453
1985	0.452
1986	0.466
1987	0.446
1988	0.438
1989	0.437
1990	0.428
1991	0.486
1992	0.435
1993	0.425
1994	0.424
1995	0.427
1996	0.430
1997	0.420
1998	0.430
1999	0.420
2000	0.430
2001	0.423
2002	0.420
2003	0.410
2004	0.403

Source: The Management and planning organization of Iran (I.R.)

The study of the distribution of Qard-Al-Hassan loans confirm that increasing share of this loan in the loan portfolio of the poor provinces and deprived regions has been able to provide the necessary background to decrease poverty in the country.

Statistics show that the poorest 4 regions of the country, that is to say, Sistan and Balouchestan, Kurdistan, Hormozgan and Qum, have received the highest share of Qard- Al-Hassan.

Table No. 3- The comparison of per capita income and Qard-Al-Hassan share of the total Qard-Al-Hassan paid in poor provinces in 2003

Province	Per capita income (Rials)	Qard-Al-Hassan share (%)
Sistan and Balouchestan	4109459	9.7
Kurdistan	6926720	6.5
Hormozgan	669479	5.8
Qum	7083031	5.7

Regarding this, we have tried to evaluate the effects of application of poverty alleviation programs in the country by using a combination of cross-section and time- series in the framework of a simple econometric model.

Methodology and data description

In order to show the effect of micro credits (Qard-Al-Hassan) on poverty alleviation, we have tried to use related indices to the target variables. To do so, we have used a Data Insertion Model between 28 provinces of the country available in some years during 1996-2003.

The applied variables in this model are as follows:

Y_{it} = per capita income in different regions (indicator of income inequality and poverty)

X_{1it} = family dimension (size, or social indicator)

X_{2it} = employment rate (socio-economic indicator)

X_{3it} = the ratio of Qard-Al-Hassan to total loan (indicator of micro credit)

$i = 1 \dots 28$ (number of regions) and t represents time.

The estimation model is:

Equation (1):

$$\text{Log}(Y_{it}) = C_{it} + \beta_{1it} \text{Log}(X_{1it}) + \beta_{2it} \text{Log}(X_{2it}) + \beta_{3it} \text{Log}(X_{3it}) + \varepsilon_{it}$$

Per capita has been considered as a good proxy of poverty.

As it was mentioned, the estimation of the model is through Panel Data method. This method not only makes it possible to use cross-section and time series data for estimating econometric models, but also is a basis for policy-making and planning inferences which is very considerable. We can study the literature of the subject in studies carried out by Maddala (1993), Hsiao (1986), Dielman (1989), Matyas and Sevestre (1986), Raj and Baltagi (1992), and Baltagi (1995). The priority of Panel-data models to Pure cross-section models is that they have more flexibility in dealing with behavioral difference of phenomena in time. The skeleton of this model is presented below:

Equation (2):

$$Y_{it} = \alpha + \beta X_{it} + \varepsilon_{it} + u_i$$

where $t = 1, 2, \dots, T$ and $i = 1, 2, \dots, n$ and n is the number of provinces and T stands for the number of time series yearly observations. There are K descriptive variables in X_{it} (except for the base year). It should be mentioned that the above panel data model is one of the balanced panel data models; that is to say in each of n provinces there are T annual observations. In this equation, α_i is the distance from the origin of i^{th} province which is considered constant in time. In practice we can introduce the difference of provinces (or i) into the equation by using Common effect, Fixed effect or Random effect methods.

Model estimation

We have here estimated three models according to equation (1). All three have been estimated by using Data insertion method of 7 year time series and cross-section (28 provinces) data. The results are presented in tables 4 and 5.

*Table 4 – The estimate of data insertion model
(Dependent variable is per capita income)*

	Variable	Fixed effect (first model)	Random effect (second model)
Constant coefficient	C	8.04 (2.2)	10.95 (2.3)
Family dimension(size)	X ₁	-2.25 (-4.9)	-1.44 (-4.8)
Employment rate	X ₂	2.4 (3.3)	1.5 (2.8)
Ratio of Qard-Al- Hassan to total loans	X ₃	-0.03 (-1.95)	-0.04 (-1.8)
R ²	Index coefficient	81%	80%
D.W.	Durbin- Watson	2.2	2.1

According to the results of model estimation in table 4, it is seen that family size has a negative effect on per capita income. Employment variable is positive and both coefficients are significant from statistical point of view. Although the variable ratio of Qard-Al-Hassan to total loans is statistically significant, its effect in comparison to other variables is low. Therefore we conclude the Qard-Al-Hassan provided in 28 provinces as micro finance credit has a positive effect on the increase of per capita income and poverty alleviation during survey period (1996-2003). But due to the existence of challenging problems and the low ratio

of Qard-Al-Hassan to total loans, the effectiveness of this coefficient is low.

In order to scrutiny the model, by considering the constant coefficients in the provinces, we obtain the results which are shown in table 5. The results of this model show that the family size negatively and employment rate and Qard-Al-Hassan positively affect per capita income. But the effects of Qard-Al-Hassan are less than the two variables of family size and employment rate. Of course the degree of effectiveness of Qard-Al-Hassan in various provinces differs, so that the low income provinces have received more Qard-Al-Hassa. This effect has been much more in provinces of Tehran, Isphahan, West and East Azerbaijan and Hamadan.

Table 5- Third model: the estimation of data insertion¹
(Dependent variable is per capita income, No. observations =224)

Dependent variable	Coefficients and (t) statistic
Constant coefficient	-8.89(-1.5)
Family size	-2.9(-3.6)
Employment rate	-2.5(-2.2)
Qard-Al-Hassan Ratio (East Azerbaijan)	-0.21(-1.53)
Qard-Al-Hassan Ratio (West Azerbaijan)	-0.25(-1.48)
Qard-Al-Hassan Ratio (Ardabil)	-0.07(-9.9)
Qard-Al-Hassan Ratio (Isphahan)	-0.92(-1.89)
Qard-Al-Hassan Ratio (Ilam)	-0.37(-2.14)
Qard-Al-Hassan Ratio (Boushehr)	-0.15(-1.74)
Qard-Al-Hassan Ratio (Tehran)	-1.12(-1.4)
Qard-Al-Hassan Ratio (Chahar Mahal and Bakhtiary)	-0.05(-2.23)

¹- Figures in parenthesis

Dependent variable	Coefficients and (t) statistic
Qard-Al-Hassan Ratio (Khorasan)	-0.22(-4.39)
Qard-Al-Hassan Ratio (Khousestan)	-0.03(-3.25)
Qard-Al-Hassan Ratio (Zanjan)	-0.13(-1.49)
Qard-Al-Hassan Ratio (Semnan)	-0.06(-2.24)
Qard-Al-Hassan Ratio (Sistan)	-0.09(-4.43)
Qard-Al-Hassan Ratio (Farce)	-0.16(-0.34)
Qard-Al-Hassan Ratio (Khazvin)	-0.08(-0.31)
Qard-Al-Hassan Ratio (Qum)	-0.24(-2.62)
Qard-Al-Hassan Ratio (Kurdistan)	-0.13(-4.6)
Qard-Al-Hassan Ratio (Kerman)	-0.07(-7.2)
Qard-Al-Hassan Ratio (Kermanshah)	-0.07(-2.31)
Qard-Al-Hassan Ratio (Kohkiloye and Boirahmad)	-0.11(-3.61)
Qard-Al-Hassan Ratio (Golestan)	-0.16(-1.55)
Qard-Al-Hassan Ratio (Gilan)	-0.18(-0.53)
Qard-Al-Hassan Ratio (Lorestan)	-0.22(-3.05)
Qard-Al-Hassan Ratio (Mazandaran)	-0.06(-1.14)
Qard-Al-Hassan Ratio (Markazi)	-0.15(-2.62)
Ratio of Qard-Al-Hassan (Hormozgan)	-0.12(-3.54)
Qard-Al-Hassan Ratio (Hamadan)	-0.34(-1.1)
Qard-Al-Hassan Ratio (Yazd)	-0.19(-1.51)

Source: findings of the study.

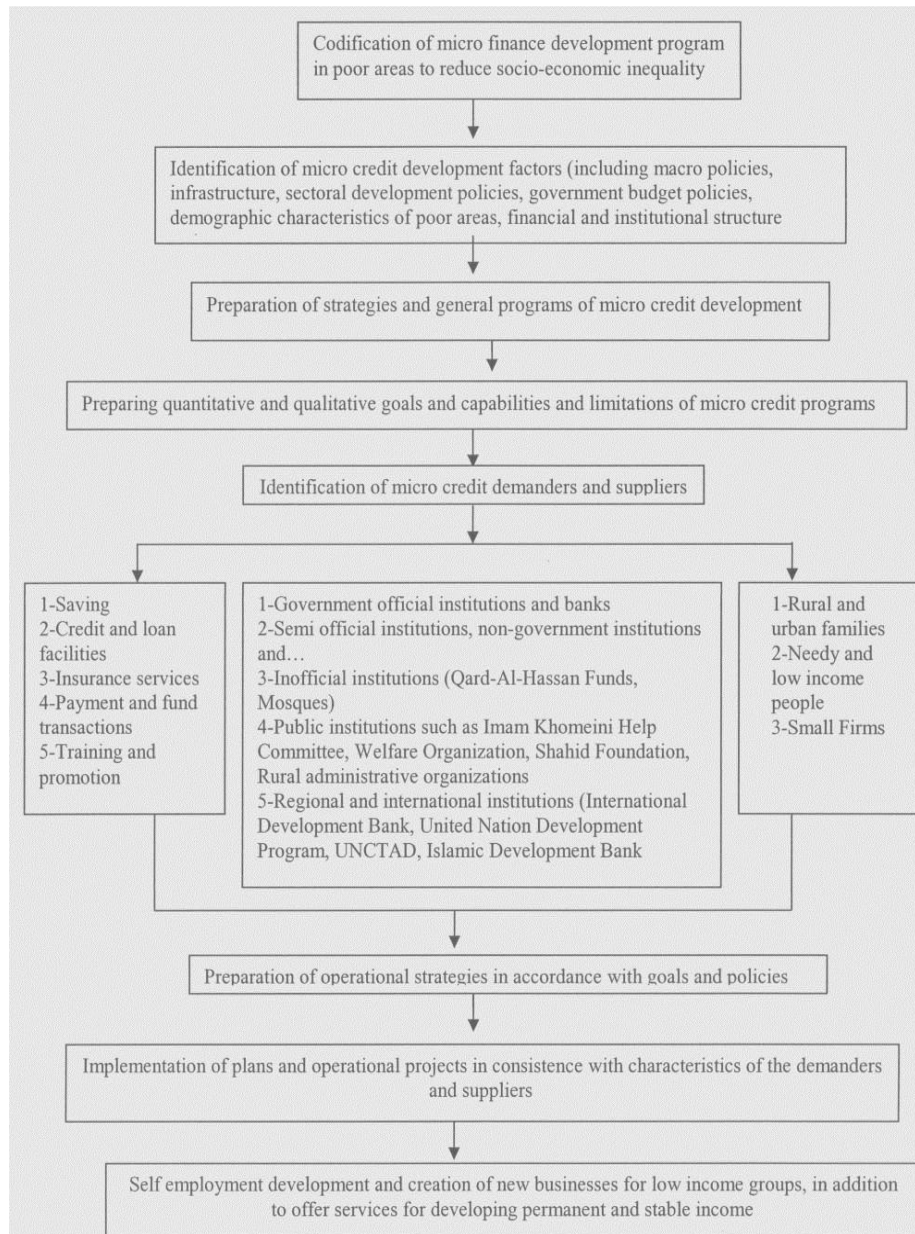
Conclusion and policy recommendations

The development of micro credit in Iran has always been facing challenges. Micro credit in the form of Qard-Al-Hassan have been paid for self employment, buying necessary goods and starting self employment in the last few decades in unofficially or semi official ways. But, what is important in the framework of micro credit expansion is, as it was mentioned, its aim which is different from other kinds of loans and has socio-economic justice feature which is more interesting. In this case, the target groups should be identified and all inequalities in this field should be minimized, otherwise, reaching social justice by application of this tool will be very difficult. In other words, targeting the distribution of micro credit is one of the government priorities for alleviation of poverty and reducing the socio-economic obstacles of low income and poor people. It should also be mentioned that micro credit has not been used in a concrete and regulated program and has always been subject of changes and review by policy makers. Therefore, regarding these conditions, it is necessary to prepare a suitable plan for development of micro credit, especially for low income and poor people in rural areas and in poor urban areas so that this framework together with the aims of strategic policies and supportive packages for the poor is applied to micro finance.

As the results of the fitted model suggest, the achievement of goals of increase of per capita income in different regions of the country and poverty reduction of poor and deprived families is through creating permanent job opportunity and providing the with finance is possible. Therefore, it should be mentioned that providing loans in the framework of micro credit (Qard-Al-Hassan) cannot alleviate the poverty by its own. So, developing a targeted model to optimize the distribution of credit resources among low income and poor people of the society can play an important role in the stability of strategic poverty elimination program. In this way, the government with the cooperation of banking system and financial institutions in the frame work of targeting allocation of low cost loan of Qard-Al-Hassan for small operational projects which create jobs and preparing the necessary background to increase the income capability and businesses suitable for low income people is necessary. Regarding this aim, the structure of micro credit programs in the form of Qard-Al-

Hassan with poverty alleviation goal and the increase of income capacity of the low income groups of the society can be presented in the following chart.

Chart 4: Micro finance development model in poverty alleviation programs



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*Attached table**Indicators of Human Development in Islam World*

	Country	Indicators of Human Development in Islam World	Life Expectancy	Youth literacy	Average school years	Average per capita income(\$)	Economic growth (%)	Population (million)
1	Brunei	44	74.0	86.0	5.0	14000	Na	0.28
2	Kuwait	51	74.6	73.9	5.5	13126	Na	1.4
3	Qatar	56	69.6	79.0	5.8	16750	-6.6	0.51
4	Malaysia	57	70.4	80.0	5.6	2790	5.6	18.6
5	Bahrain	58	71.0	79.0	4.3	7130	0.1	0.53
6	Ghazakhstan	61	69.0	97.0	5.0	1680	1.2	17.0
7	United Arab Emirates	62	70.8	65.0	5.6	22020	-1.8	1.7
8	Saudi Arabia	67	68.7	64.1	3.9	7510	0.4	16.8
9	Turkey	68	66.7	81.9	3.6	1980	5.4	58.5
10	Azerbaijan	71	71.0	96.3	5.0	740	1.5	7.4
11	Syria	73	66.4	66.6	4.2	1160	1.4	13.0
12	Albania	76	73.0	85.0	6.2	930	Na	3.4
13	Libya	79	62.4	66.5	3.5	5420	Na	4.9
14	Turkmenistan	80	66.0	97.7	5.0	1230	2.5	3.9
15	Tunisia	81	67.1	68.1	2.1	1720	3.5	8.4
16	Kyrgyzstan	82	68.0	97.0	5.0	820	1.9	4.5
17	Iran (I.R.)	86	66.6	56.0	3.9	2200	2.5	59.6
18	Uzbekistan	91	69.0	97.2	5.0	850	2.6	21.5
19	Oman	92	69.1	35.0	0.9	6480	9.3	1.6
20	Tajikistan	97	70.0	96.7	5.0	490	2.9	5.6
21	Jordan	98	67.2	82.1	5.0	1120	0.6	3.9
22	Iraq	100	65.7	62.5	5.0	3558	Na	19.2
23	Lebanon	103	68.1	81.3	4.4	1234	Na	3.8
24	Indonesia	105	62.0	84.4	4.1	670	5.8	184.3
25	Algeria	109	65.6	60.6	2.8	1840	Na	26.3

	Country	Indicators of Human Development in Islam World	Life Expectancy	Youth literacy	Average school years	Average per capita income(\$)	Economic growth (%)	Population (million)
26	Egypt	110	60.9	50.0	3.0	640	4.5	54.7
27	Mora	111	62.5	52.5	3.0	1030	4.3	26.2
28	Gabon	114	52.9	62.5	2.6	4450	0.9	1.2
29	Maldives	118	62.6	92.0	4.5	500	10.2	0.23
30	Cameron	124	55.3	56.5	1.6	820	2.1	12.2
31	Pakistan	132	58.3	36.4	1.9	420	6.5	119.3
32	Nigeria	139	51.9	52.0	1.2	320	1.4	101.9
33	Comoro	141	55.4	55.0	1.0	510	2.6	0.51
34	Yemen	142	51.9	41.1	0.9	520	Na	13.0
35	Senegal	143	48.7	40.0	0.9	780	2.9	7.8
36	Bangladesh	146	52.2	36.6	2.0	220	4.2	114.4
37	Sudan	151	51.2	28.2	0.8	480	0.3	26.5
38	Uganda	154	42.6	50.5	1.1	170	5.9	17.5
39	Benin	156	46.1	25.0	0.7	410	2.1	5.0
40	Mauritania	158	47.4	35.0	0.4	530	0.6	2.1
41	Mozambique	159	46.5	23.5	1.6	60	-1.1	16.5
52	Bissau Gina	163	48.3	19.0	0.4	620	Na	0.55
43	Somalia	164	42.9	39.0	0.4	220	3.3	1.0
44	Gambia	165	46.4	27.0	0.3	120	Na	8.3
45	Mali	166	44.4	30.0	0.6	370	3.2	1.0
46	Chad	167	45.4	35.9	0.4	310	2.5	9.0
47	Nigeria	168	46.9	32.5	0.3	320	6.3	6.0
48	Sirleon	169	45.9	31.2	0.2	280	-0.9	8.2
49	Afghanistan	170	42.4	23.7	0.9	160	1.1	4.4
50	Burkina Faso	171	42.9	31.6	0.9	Na	Na	21.5
51	Ghana	172	47.9	19.9	0.2	300	4.0	9.5
52			43.9	26.9	0.9	510	Na	6.1

Economic Indicators:

Minimum Monthly Nominal and Real Wage Rate in 1999-2004

Year	Minimum nominal wage (Rials)	Minimum nominal wage growth (percent)	Average CPI (1997=100)	Inflation rate	Minimum real wage (Rials)	Minimum real wage growth (percent)
1999	361830	21.8	141.8	20.1	255169	1.5
2000	458010	26.6	159.7	12.6	286794	12.4
2001	570000	24.5	177.9	11.4	320405	11.7
2002	698460	22.5	206.0	15.8	339058	5.8
2003	853380	22.2	238/2	15.6	358262	5.7
2004	1066000	24.9	274.5	15.2	388342	8.4

Source: Social Security Organization,

Extracted by: Bureau of Macro-economic Planning, Management and Planning Organization.

Annual Wage Growth of Government Employees in 1999-2004 (percent)

Year	Base wage coefficient (1)	Base wage coefficient growth rate (2)	Annual percent increase (3)	Sum of the increase (4) =(2)+(3)	Inflation rate (5)	Net growth (6) =(4) -(5)
1999	200	11.1	5	16.1	20.1	-4.0
2000	230	15.0	5	20.0	12.6	7.4
2001	260	13.0	5	18.0	11.4	6.6
2002	290	11.5	5	16.5	15.8	0.7
2003	320	10.3	5	15.3	15.6	-0.3
2004	350	9.4	5	14.4	15.2	-0.8
Average of 3 rd Development Plan (2000-2004)	290.0	11.9	5	16.9	14.1	2.7

Source: Central Bank of Islamic Republic of Iran,

Extracted by: Bureau of Macro-economic Planning, Management and Planning Organization.