

**The American University in Cairo
School of Global Affairs & Public Policy**



**THE EGYPTIAN SMART RATION CARD PROGRAM:
A TOOL FOR EFFECTIVELY TARGETING THE POOR**

**A Thesis Submitted to
The Department of Public Policy and Administration**

**In partial fulfillment of the requirements for
The degree of Master of Arts in Public Policy and
Administration**

**By Mohamed Hassan Youssef
Academic Degrees Previously Earned
B.Sc. of Economics**

(Under the Supervision of Dr. Hamid Ali)

January 2010

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DEDICATION

To my mother for all what she has done for me;

And to my small family: wife and the two kids, Toka and Ahmed, for all
what they bear during studying for this Master degree.

ABSTRACT

“The Egyptian Smart Ration Card Program: A Tool for Effectively Targeting the Poor” is the thesis research project submitted to the American University in Cairo by Mohamed Hassan Youssef under supervision of Dr. Hamid E. Ali.

The main questions addressed by this research project are: Why did the government of Egypt (GOE) decide to implement the smart ration card project? What has been the experience in establishing the smart ration card system in Egypt? What problems did the new system encounter? What overall results did GOE achieve? In an attempt to answer these questions, we conducted interviews with top senior officials and key figures at both the Ministry of State for Administrative Development (MSAD) and the Ministry of Social Solidarity (MOSS) in order to understand the recent developments made and what are their future views and plans regarding the implementation of smart card program in Egypt.

This study is divided into six chapters: Chapter One is devoted to an introduction. Chapter Two discusses the literature review and presents the

experience of India in smart cards and lessons learned for Egypt.

Methodology is explained in Chapter Three. The analysis of the results is discussed in both Chapter Four, which addresses the adaptation of smart card system in Egypt, and Chapter Five, which discusses the implementation of smart card system in Egypt. Chapter Six will be devoted to the evaluation of the new system. The thesis will end with Conclusions and recommendations.

The main finding of this thesis is that the benefits of application of smart ration card system in Egypt surpassed the cost. Smart ration card system provides transparency, efficiency and accountability and minimizes corruption, despite the limited access of some sectors of society to the digital card technology and the fact that not all the facilities are yet equipped to handle the magnetic card. The smart card can open the horizon even to adopt the cash transfer system in the future.

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ABBREVIATIONS

ATMs	Automatic Teller Machines
ESIIC	Egyptian Sugar and Integrated Industries Company
FIHC	Holding Company for Food Industries
GOE	Government of Egypt
GASC	General Authority for Supply Commodities
ID	identification (data)
IMF	International Monetary Fund
ISCS	Integrated Smart Card System
IT	Information technology
MASCs	Multi-Application Smart Cards
MICT	Ministry of Information and Communication Technology
MOF	Ministry of Finance
MOSS	Ministry of Social Solidarity
MSAD	Ministry of State for Administration Development
PARG	Public Authority for Rationed Goods
PDS	Public Distribution System
PIN	Personal Identification Number

POS	Points of Sale
SCC	Strategy Change Cycle
SWOC	strengths, weaknesses, opportunities, and challenges

CHAPTER ONE: INTRODUCTION

The Government of Egypt (GOE) has launched an ambitious program of economic, social and political transformation¹. This program requires, among other things, a redefinition of the role of the state. The state can no longer be seen as the main provider of jobs, goods and subsidies for its citizens (Osborne & Gaebler, 1992). Rather, the state should serve as a leader or manager that guides all its capabilities towards a certain direction. Under this new vision, the people should know their responsibilities before demanding their rights². In the new social contract that the country is moving to, the role of the State is to oversee the public interest and protect the poor and vulnerable in an essentially private-sector-led economy (World Bank, 2005 and Osborne & Gaebler, 1992).

¹ In 1977, the GOE decided to increase prices of basic food stuff by cutting their subsidies in order to reduce the budget burdens. People were very angry, and their angry turned into massive riots, which ended only when the state announced the cancellation of all these regulations. These riots have left a legacy of GOE caution regarding food subsidy reform.

² This step is consistent with the principles of Osborne and Gaebler presented in their book entitled: *Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector*.

With this spirit of entrepreneurship, the state is working to transform the Egyptian welfare service delivery system. The reform of the food subsidy delivery system is perhaps long overdue. Even though in Egypt the poor enjoy food subsidies as originally designed to be allocated to them in the food subsidy program, they are not fully utilizing such allocations because they lack the access to food rationing facilities and the program itself suffers from corruption and mismanagement (Nower, 2008). The current food subsidy policy promotes rent seeking behavior in informal market, exploiting the price differences of the subsidized commodities. For example, some households sell a part of their ration allotments in the parallel markets and gain profits as a result of price differences (NDP, 2004).

The current food subsidy program was under great pressures to be eliminated (Salevurakis & Abdel-Haleim, 2008). The whole debate on food subsidies in Egypt centers on economic and social considerations. Those who call for elimination of subsidies for economic considerations ignore any resulting social unrests that may happen. The claims for economic considerations are either the necessity for applying market mechanism or production efficiency. The other problem in their point of view is the volume

of leakage of these subsidies to the rich. Table (1) below illustrates some of the effects of such leakage in Egypt³.

**Table (1):
Food Subsidies Distribution between the Poor and the Better-off (%)**

Items	The Poor				Better Off	Total
	Extreme Poor	Moderate Poor	Near Poor	Total		
Baladi Bread	4	14	20	38	62	100
10-piaster Bread	0	1	3	4	96	100
Ration Cards Subsidies	4	16	23	43	57	100
All Food Subsidies	4	14	20	38	62	100

Source: World Bank. 2007. Arab Republic of Egypt: Poverty Assessment Update. Washington, DC: The World Bank.

In the current paper ration system, more than two thirds of the subsidies go to the richest 60 percent middle and upper middle class. Only one third of government subsidies go to the poorest 40 percent. As the process lacks control, some grocers force the beneficiaries to purchase certain commodities (IDSC, 2005b). Commodities offered through the current paper ration card program vary from time to time. Usually, they are selected from eight main goods: cooking oil, sugar, rice, tea, margarine,

³ According to the World Bank study (2007), it differentiates between three types of the poor: the extreme, moderate, and near according to their annual expenditure in 2005.

beans, lentils, and pasta which are available at subsidized prices on a monthly quota basis to those with ration cards. Eligibility for the cards is based on self-reported income. Egypt has been able to reduce the overall costs of its subsidies by raising food prices, reducing the number of ration card holders, and reducing the number and quantity of subsidized food items.

In general, universal subsidy programs are vulnerable to fraud and leakage to non-beneficiaries. In situations in which the open market price of a commodity is higher than the rationed amount, dealers and retailers have an incentive to sell a portion of the commodity on the open market. This happened in some programs worldwide and frequently in Egypt. This leads to a sharp decrease in the benefit of the targeted beneficiaries (Nower, 2008).

On the whole, the Egyptian ration card system suffers from other defects characterizing most universal subsidy programs. The main disadvantages of these programs can be traced to poor targeting and high budgetary costs. Poor targeting is represented in the leakage that may be

directed to the parallel market, decreasing the opportunities of the poor to have the commodities without creating shortages. Price stabilization programs are expensive. This is because they involve large operations and their budgets are hard to control. If the government is committed to defending a given price level, an increase in the international price will require larger expenditures, as occurred following the increase in the price of agricultural food crops in 2008 (IDSC, 2005a).

Moreover, subsidized sales distort marketing and production incentives. When the government attempts to create a parallel market infrastructure, it crowds out private trade or preempts its development, which often results in an inefficient distribution network. It can also have a negative impact on producers by distorting their incentives (IDSC, 2005a). Food subsidy programs may be biased toward urban populations. If the program emphasizes the consumption patterns of urban residents, this might result in an implicit tax on small rural producers by keeping local prices much lower than they would be in the absence of subsidies.

All these defects of the universal subsidy programs, and specially paper ration cards, pave the way for another new and more convenient system to be adopted in Egypt. The new program replaces paper ration cards by smart card system, which is still a new one and in its early stages. It is worthy to mention that more people are falling into poverty and having difficulties of access to the food subsidy. Many studies were made to search how to improve the food subsidy program⁴, but there is still a need for more research on how the smart ration cards can improve the program performance and effectiveness.

The purpose of this thesis is to address the following questions: Why did the GOE decide to implement the smart ration card project? What has been the experience in establishing the smart ration card system in Egypt? What problems did the new system encounter? What overall results did the GOE achieve? We will give recommendations for improving the program

⁴ See for example the following studies:

- Helmy, O. (2005). The Efficiency and Equity of Subsidy Policy in Egypt. Cairo: ECES.
- Information and Decision Support Center (IDSC). (2005). Alternatives for Developing the Food Subsidy System in Egypt. Cairo: IDSC.
- Nower, T. (2008). Reforming Subsidy System in the Egyptian Economy. Cairo: National Planning Institute.
- Zakaria, K. (2005). Food Subsidy Policies in Egypt. Cairo: PARC.

and examine what lessons can be drawn for other countries considering a similar program.

The new subsidy smart card system is being implemented under a public private partnership (PPP) between the Government and a consortium of private companies handling the project's technical applications. The companies financed the whole project after securing a suitable profit margin. The profit was reasonable due to the large number of cards needed to cover the Egyptian households.

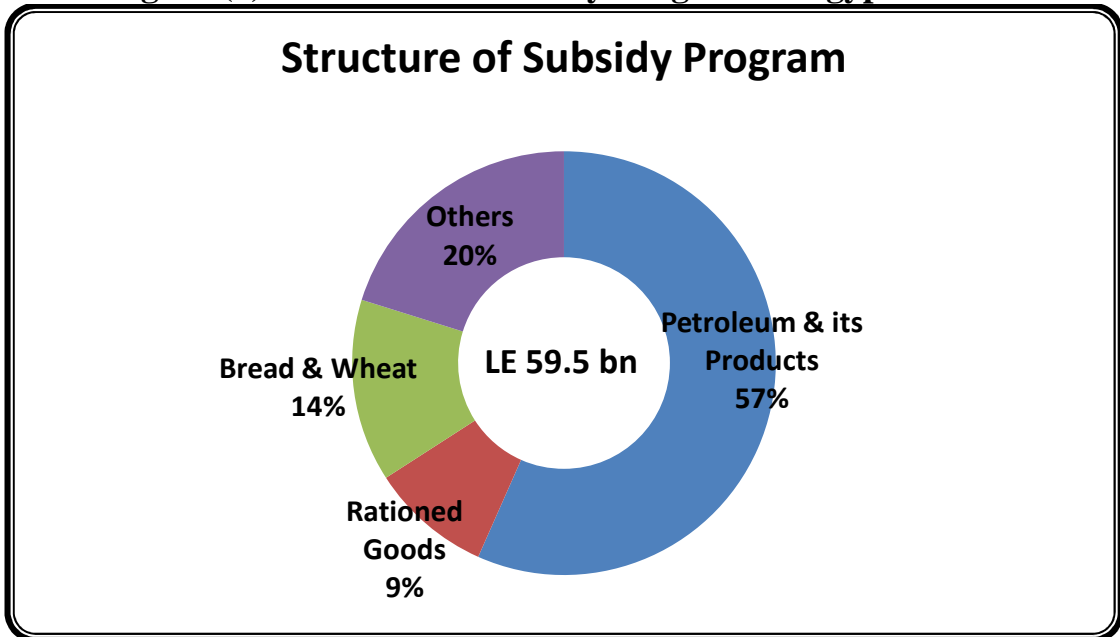
In light of the GOE efforts to support limited income people and improve the service it provides to them, the new smart card rationing system is being implemented to replace the old paper ration card system. According to some officials at the Ministry of Social Solidarity (MOSS)⁵, the plan is to issue 12 million subsidy smart cards covering 63-64 million beneficiaries. The smart card has an embedded chip with data about the cardholder's family monthly quota of subsidized goods. The new program is aimed at

⁵ The interview with the advisor to the Minister of Social Solidarity for Information Infrastructure held on November 12, 2009.

establishing mechanisms by which the GOE can ensure that subsidized goods efficiently reach the target groups, thereby eliminating opportunities for abuse permitted by the old system. The MOSS officials agree unanimously that the smart cards allow for better tracking of subsidized commodities, curtailing the amount of subsidized goods that end up in the black market and allowing for 20-25 percent savings in the ration commodity stocks.

Moreover, the GOE intends to utilize the digital storage capacity of the smart cards to store personal data that can be used by the card holder and their family to obtain basic government services such as health care, education and pensions. The GOE spends billions of Egyptian pounds to widen the country's social safety net, as shown in Figure (1) below. In 2009, it directs about LE 59.5 bn to cover its subsidy program. Among these amounts, the ration card program absorbs LE 5.5 bn, or 9 percent of the total program.

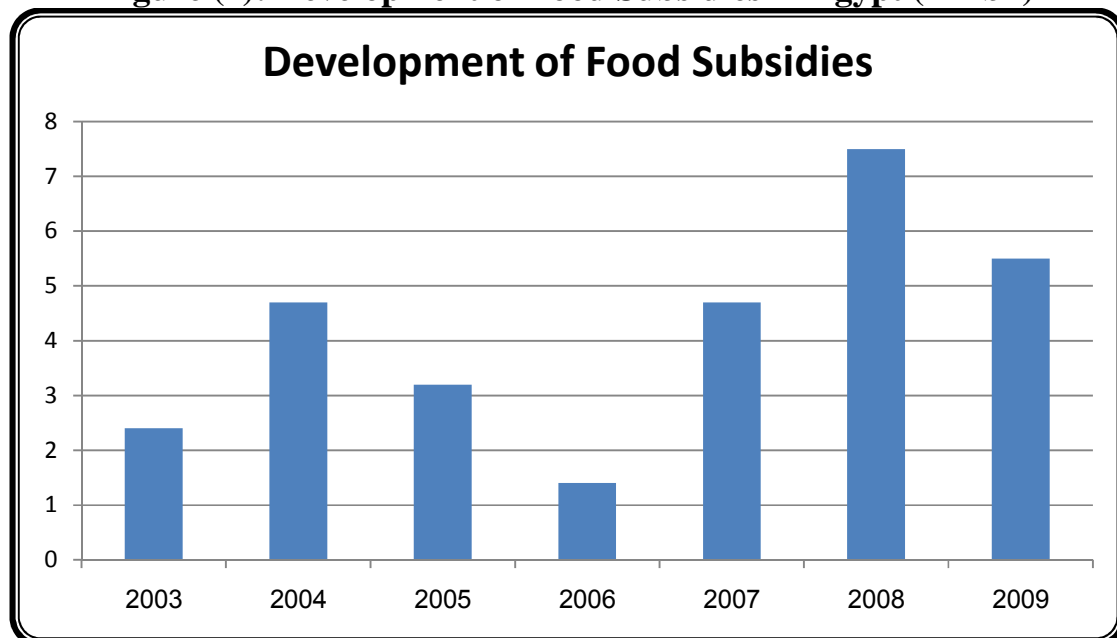
Figure (1): Structure of Subsidy Program in Egypt in 2009



Source: MOF, Financial Monthly, November 2009, volume: 5, no. 11.

Figure (2) shows the development of food subsidies in Egypt from 2003 to 2009. The sharp decrease in food subsidy allocations that took place in 2006 was due to the elimination of some foodstuffs from food rationing system due to the low demand from people (IDSC, 2008). The decrease in allocations for 2009 from the previous year is due to the decrease which happened in the world price of foodstuffs. Note that special care is devoted to low-income citizens through receiving new ration cards. Through the amounts available from the decrease in food importation invoice, the GOE is able to add some more people to the ration card system.

Figure (2): Development of Food Subsidies in Egypt (LE bn)

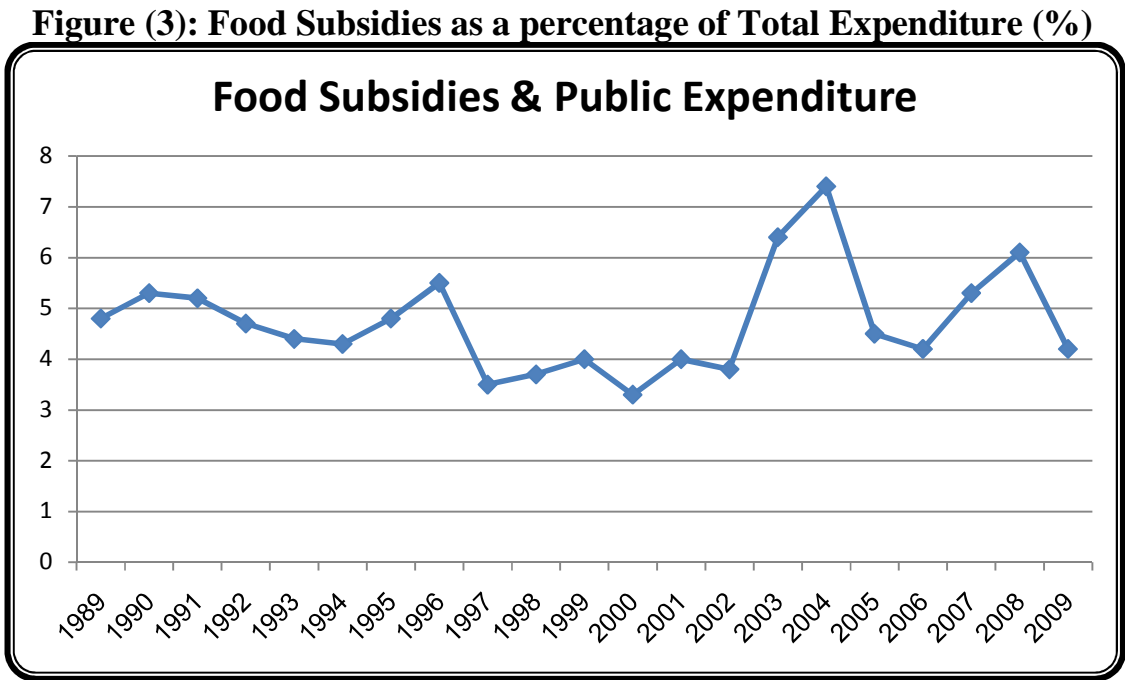


Source: NDP, Annual Conference, Different Years.

When calculating food subsidies as a percent of total expenditure, we can find that Egypt has undertaken some strategies since the late 1980s aimed to reduce the cost of the food subsidy. Nevertheless, costs remain high (about LE13.6 billion in 2009) for both rationed commodities and *baladi* bread (NDP, 2009). Reform of the ration-card system would have a fairly small budgetary impact, as the larger impact may happen when reforming the bread and wheat as well as other subsidy programs⁶.

⁶ There are about 28 different programs for providing subsidies in Egypt, the most common of which is the subsidies directed to petroleum products (NDP, 2009).

More importantly, after the floatation of the Egyptian pound in 2003, the food prices sharply rose, affecting most people and especially the poor. The GOE, therefore, decided to increase the number of subsidized food stuff on ration cards as from May 2004, to include cooking oil, sugar, rice, tea, pasta, lentils, beans and margarine. The bread subsidies also included *fino* bread at LE 0.10 in addition to *baladi* bread at LE 0.05.



Source: The period from 1989 – 2006 is taken from: Al-Issawi, I; *The Egyptian Economy in 30 Years*; Cairo: The Academic Bookshop; 2007 & the remaining three years 2007 – 2009 are taken from NDP, Annual Conference, Different Years.

CHAPTER TWO: LITERATURE REVIEW

This chapter tries to identify in detail the different kinds of food subsidy and its role in poverty alleviation. It also attempts to explore the defectiveness of the paper ration card system and to identify the factors that lead countries to adopt working with smart ration cards.

2-1- Different Kinds of Food Subsidies

Social safety net programs have become a basic component of poverty alleviation strategy in world countries. Attitudes towards safety nets vary among policy makers, analysts, and the general public. The most common views are that the poor should be provided with enough living means and they should not be left starving (World Bank, 2005). However, most analysts fear that social transfers may discourage both recipients from work and tax-payers from being productive. The most common view held in this regard is that it is better not to give people fish, but to give them fishhooks and teach them how to fish (Grosh; Ninno; Tesliuc; & Ouerghi; 2008). The subsidy programs are considered as a distribution tool which enables the State to help the poor and correct income inequalities. Cost effectiveness of such

transfers will increase when they are well-directed, i.e. reach only those who deserves them (IDSC, 2005a).

Food subsidies are a major part of the social safety net programs (IDSC, 2005b). Food subsidies are a kind of consumer subsidies that aim to provide a part of the cost of subsidized commodities out of public funds. The prices of such commodities could be kept down, and thus consumers can purchase them easily (Pigou, 1948). Although food subsidy programs vary from one country to another, they all have some common features such as the types of subsidized goods, targeting mechanisms and cost to the public budget. When applied, these programs may be characterized by excess leakage because of inefficient targeting policies, high and always unpredictable expense, contribution to macroeconomic instabilities, and generating fear among political leaders (World Bank, 1999).

Social safety nets may take many different forms: cash transfer programs, food-related programs, public work programs, and micro finance programs (Nower, 2008). The food-based programs include food rations and

other in-kind food transfers and supplementary feeding, school feeding, and emergency food distribution programs (IDSC, 2005b).

In most cases, targeted households collect rations at designated public or private distribution centers either for free or at a reduced price. Take-home rations are a special case of rationing in which rationed quantities of food are delivered directly to beneficiary households. Many such programs are found in Africa, Latin America, and South Asia. The main difference between these programs and general price subsidies is that they theoretically restrict access to targeted beneficiaries (Grosh; Ninno; Tesliuc; & Ouerghi; 2008).

According to Nower (2008), there are four food-related subsidy programs to be applied in general. The first program is termed *Rationed Subsidies*. According to this policy, certain quantities of goods are distributed to the poor at prices lower than prevail at the market, but their quality is lower than (or equal to) their counterparts in the market. The quantity of given goods is directly proportionate with family size. The main drawback of this policy is that it leads to price distortion. This may lead to

create a black market in cases where there is no effective internal control and accountability. The second program is *Food Stamps, Vouchers and Coupons*. According to this model, coupons of certain monetary values are distributed to targeted people, in order to enable them to receive some goods at moderate prices.

Food Price Subsidies is the third program. This is a universal subsidy system, aiming to guarantee the availability of the goods at prices lower than market prices for all consumers. Subsidizing *baladi* bread in Egypt is an obvious example of this policy. The other form of this policy is subsidizing low-quality goods to be self-directed primarily to the poor (IDSC, 2005a). Finally, the fourth program is *Supplementary Feeding Programs*. This policy aims at targeting certain groups, such as school students, infants, and pregnant mothers. Such programs may include school meals, infants' food (milk), etc. (Nower, 2008).

All the above-mentioned food subsidy programs are considered as *in-kind transfers*⁷. The use of in-kind transfers goes back to ancient Egypt and to the Roman Empire. Food distribution programs have played an important role in social policy and development, partly because of the availability of food aid from Australia, the United States, and other OECD countries (del Ninno, Dorosh, and Subbarao, 2007).

Most countries, including Egypt, start moving now to the other kind of subsidies, i.e. *cash transfers*. Among the different kinds of cash transfers in other countries, *conditional cash transfers* are attracting increased attention. Under these programs, the governments tie giving cash transfers to a family to some certain conditions, such as enrolling all of its children in schools or paying regular visits to clinics. These conditions help achieve some secondary goals aiming to alleviate poverty, such as decreasing education drop-outs or improving health condition (IDSC, 2005a). In an early stage of reform, cash transfers may be a difficult choice. It is better to reform the program first and then adopt this choice.

⁷ The existing in-kind subsidy programs, which form the basis of the current safety net, are costly and ineffective. They create market distortions and inefficiencies, and benefit the rich far more than the poor (Grosh; Ninno; Tesliuc; & Ouerghi; 2008).

The debate on the use of cash rather than food has been receiving renewed attention in recent years (Gentilini, 2007), partly because of the issues surrounding the use of food subsidies in Europe and the United States, which have been generating large food surpluses that are often distributed in the form of food aid. Thus the decrease in the availability of food aid resources for development has resulted in a shift away from the use of food transfers (Barrett & Maxwell, 2005). Moreover, most kinds of subsidies are under great debate among economists, as there is no one specific international price which can be considered as a reference for goods. The distortion of price systems resulting when adopting in-kind subsidy policies is the main critique as well as the application defects such as leakage to the rich and irrational distribution of the state resources (IDSC, 2005b).

As the argument in Egypt is to choose between in-kind transfer programs and cash transfer programs, a comparison between these two programs can be summarized in Table (2):

Table (2): Advantages and Disadvantages of Cash and In-kind Transfers

	cash transfers	In-kind transfers
Advantages	<ul style="list-style-type: none">• Consumer sovereignty is achieved, as beneficiaries can freely choose among the different goods. Good selection will differ from citizen to another.• Do not require huge administrative expenses, as there are not expenses directed for transport• When cash transfers are spent locally, the multiplier effects will appear in generating flows of income and spending in the economy.• Do not result in price distortions, as there will not be two prices for a good.• Under this program, it is easy to predict the volume of public spending.• Help in macroeconomic stability as cash transfers can be increased when the economic performance or living standards are low.	<ul style="list-style-type: none">• Ensure the availability of goods at low prices• Assist in improving the nutrition for the poor, by guaranteeing consumption of basic goods and services• Politically desired
Disadvantages	<ul style="list-style-type: none">• To apply this program, detailed data about the poor should be available.• May lead to increase the general price level• The amounts available may be spent on unnecessary goods.• Not politically desirable	<ul style="list-style-type: none">• Leakage of some subsidized goods to the black market• May lead to price distortions• Need administrative expenses more than the cash transfer program

Source: - Harvey, P. (2005). *Cash and Vouchers in Emergencies*. United Kingdom: Humanitarian Policy Group.
- Barrientos, A. & DeJong, J. (2004). *Child Poverty and Cash Transfers*. London: Childhood Poverty Research and Policy Centre (CHIP).

The discussion presented in Table (2) reveals that the choice of cash transfer may be the better choice. However, countries cannot opt for this choice when their subsidies programs are still obsolete as they cannot bear this experience. It is better to innovate their systems and improve the eligibility conditions before shifting to this option.

2-2- Role of Food Subsidy Policy in Poverty Alleviation

The debate on food subsidies gains its importance recently as it was a core component in reform programs initiated by the International Monetary Fund (IMF) and World Bank during the 1980s and 1990s. The most common argument of governments to reject the suggestion of eliminating food subsidies is the fear of the resulting social unrests. In Egypt, for example, the GOE decided to reduce the budget by cutting subsidies on basic food stuff and to increase their prices to the market levels in 1977. The upset over price hikes turned to riots, which ceased only after the announcement that food price increases were canceled. Since then, there was no serious discussion to revamp the system. However, the leakage and poor targeting of most current food subsidy programs are the key criticisms; the minimization of these leakages becomes the first priority for any policy reform (Besley & Kanbur, 1988).

Egypt uses a partial self-targeting method, which is now under great pressures to be replaced by other more suitable programs. At present, food subsidies are offered to all people and consist of two main programs: the first is *baladi* bread and wheat flour, which is a general subsidy program open for all people but offering coarse low quality bread, and the second is rationed commodities, which is now open for all people but offers only a few basic commodities. In future, registration of all households into the smart card system will enable selection measures to be applied to choose the most vulnerable groups.

2-3- Smart Card Technology and its Potential

One of the main e-government applications applied now is what is known as the Multi-Application Smart Cards (MASCs). They represent one of the technological break-throughs of our time. MASCs facilitate simplification of procedures and enhancing the efficiency in administering various programs including the smart card food ration system. The application of this technology cuts across usage; from government to citizens, government to other agencies and among agencies (Virmani, 2007).

Conceptually a MASC is like a multi-storied building wherein each programs is *housed* in one floor. While the unique identification (ID) will manage the main entrance to the building, each program administering agency will have the *key* (password) to enter a specific floor only. The unique ID will be a key identifier essential in helping to remove identification errors of beneficiaries. Moreover inter-program benefit duplication could also be tracked using this identifier (Virmani, 2007). There is a natural tendency to think of the physical card when smart card is mentioned. The Integrated Smart Card System (ISCS) is, however, much more than being merely an electronic card that will be issued to the actual or potential beneficiaries of subsidy programs; it encompasses a range of back office integration and administration simplified applications.

The smart card has the potential to constitute a national identity card. For instance, the card could contain information on citizenship and voting eligibility (constituency for voting) as provided and checked by the Ministry of Interior. Secrecy and confidentiality clauses would have to be built into the national smart card system by law. For example, any person who does not want to avail of any subsidies or entitlements from the government need not provide the information needed for calculating

and monitoring the subsidy or entitlement. They would for instance only provide the information necessary to obtain a passport and voter registration card (Virmani, 2007).

The administering of smart card systems is very much similar to the credit card system. All the credit card companies, as well as companies that provide services to credit card issuers or marketers, would be interested in competing to obtain the contract for the administration of such a system. As a credit card company has to incur a fixed cost in setting up its own credit card system, these companies may be willing to charge lower fees if they can share the fixed costs of the public system with their private card systems. This could make a significant difference in the cost of extending the system to the rural areas. The cost of setting up and running a nationwide smart card system would generally be significantly less than that of a paper related system (Harvey, 2005).

The smart card system gives flexibility to updating the household information. For example, the identity of the households below the poverty line is not fixed from year to year. The largest turnover occurs because of health shocks followed by natural disasters (droughts and floods) that knock people below the poverty line, while others who have

recovered from the shock or have improved their position move above the line. Annual updating of entitlement related information could be done for those below the poverty line who may move upwards and for those who were above the poverty line and then moved downward. Even disaster related variables could be built into the smart card through which poor people living in disaster prone areas could be assisted (Gentilini, 2007).

Another possible usage of smart cards is for smart ration card systems. Smart ration cards can facilitate and simplify procedures and minimize fraud cases in dealing with subsidies. This system is adopted in some developing countries, such as India, China and the Philippines (Grosh; Ninno; Tesliuc; & Ouerghi; 2008).

For Egypt, under Dr. Nazif's cabinet, the GOE took a great step to reform the ration card program by adopting the smart ration card technique. The new system was directed to cover two basic (sugar and cooking oil) and four supplementary products (additional sugar and cooking oil plus rice and tea) (IDSC, 2005b).

According to a statement by Dr. El-Moselhi, the Minister of Social Solidarity, about 62.5m are now registered on the ration card program, representing 82 percent of Egypt's total population⁸. However, this will only be for a short period until registering all Egyptian households and recording essential information about them is complete. Then the GOE will apply a suitable policy to offer subsidies according to some certain criteria.

2-4- Lessons Learned from the Indian Experience

Country experience indicates the availability of different tools to select beneficiaries for food subsidies. These tools depend on some measures, such as: means tests, proxy means tests, community targeting, geographical targeting, demographic targeting, or self-targeting (Helmy, 2005). Targeting the most vulnerable people and directing subsidies to their due beneficiaries in order to achieve program goals are the two important issues that have utmost priority in agenda of policy makers. Most developing countries adopted some in-kind or cash programs to improve their subsidy systems. The most common subsidy programs are

⁸ Al-Ahram: 2008, December 12, p. 7.

the Public Distribution System (PDS) of India, Bolsa Familia of Brazil⁹ and Progres a of Mexico¹⁰. Although Egypt has built its program on the Chinese model, the unavailability of data on this experience forces us to choose the Indian experience instead. The experience of India, therefore, will be studied in detail as it has some similarities with the Egyptian experience and as India has higher number of population, entrenched bureaucracy and higher level of poverty and inequality. The application of smart card, therefore, can face similar obstacles and difficulties.

In India, the food system is managed by state governments and provides rationed amounts of basic food items (rice, wheat, sugar, and cooking oil) at below-market prices¹¹. In 1992, the subsidy on food grains was increased for people in tribal, drought-prone, and desert areas. Until 1997, access to the system was universal. In 1997, it was replaced by the targeted public distribution system (PDS) in which targeting was shifted

⁹ World Bank. (2005). Brazil's Bolsa Familia Program Celebrates Progress in Lifting Families out of Poverty. Retrieved November 23, 2009, from: <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/BRAZILEXTN/0,,contentMDK:20702063~menuPK:322363~pagePK:141137~piPK:141127~theSitePK:322341,00.html>

¹⁰ International Food Policy Research Institute (IFPRI). (2002). PROGRESA: Breaking the Cycle of Poverty. Washington, DC: IFPRI.

¹¹ The Indian subsidy program includes also some nonfood products, such as: kerosene, coal, and standard cloth.

from poor regions to poor households that were entitled to ration cards that allowed them to buy higher quantities at a subsidized price. Specific amounts of food grain were available at a highly subsidized price for families below the poverty line. Since 1997, those classified as non-poor have not received any subsidy unless they live in drought-prone areas, though they are served by a network of more than 462,000 fair price shops. In 2001, the government decided to allocate food grains to families above the poverty line at a discounted rate of 70 percent of the original cost of the grain (Grosh; Ninno; Tesliuc; & Ouerghi; 2008).

Then Kerala, a state located in southwestern India, was selected to adopt a pilot project for applying smart ration cards. Under this project, the central government will be responsible for the purchase and transport of food stuff to the main distribution shops working under the supervision of Food Corporation of India (Virmani, 2007). The state government was responsible for the selection of families deserving the food subsidies, the issuance of smart ration cards and the distribution of food stuff through shops working under its supervision (Express Computer, 2003). This is very similar to what happened in Egypt upon applying the new smart ration card system. Suez Governorate was selected in 2005 as a pilot

project. After its success, the program was nationally adopted in all other governorates.

The concept of a unique national level citizens' identity number was developed from these initiatives as well as aspirations for a Pan-India governance system. This unique ID formed the pivot around which all other smart card applications and e-governance initiatives would revolve. This also formed the basis of a public private partnership (PPP) wherein unique ID based data were outsourced to other users. This is also very similar to what has happened in Egypt. The smart cards were initially introduced to help organize subsidy system. After that, more governmental services are expected to be added to this application.

This step is taken as a reform for PDS which was described in India as an “inefficient and corrupt” system. The Supreme Court set up a committee in 2006 to check the functioning of PDS. The committee concluded that there is an “unholy linkage between transporters, fair price shop owners and officials of the Department of Food and Civil Supply” (Express India, 2009). This is seen as the first step in overhauling the system. While the World Bank has offered to assist the government in restructuring the Public Distribution System (PDS), the Delhi government

is set to soon initiate a pilot project to launch its 'cash for food' program in the Capital. The program is in line with the idea of giving food subsidy in cash to families below the poverty line. The proposal aims to prevent misuse and stealing of food grain designed for distribution under PDS.

As part of the program, the Indian government opened bank accounts for ration card-holders from families both below and above the poverty line. The idea is to deposit the difference between market prices of grains and controlled prices the accounts of card-holders (Express India, 2009). According to some Indian officials, the cash amount to be deposited in a beneficiary's bank account would be calculated on the basis of subsidy given. For instance, if a ration card-holder is saving Rs 200 through subsidies provided by the government, the department will deposit Rs 200 in their accounts.

Following recent reports of multiple ration smart cards adopted worldwide, the idea is to make the system more transparent and ensure subsidies reach the poor, for whom PDS was designed. Even though, the Indian smart card system is far developed. Egypt can follow the footsteps of India to ensure the accessibility of the poor to smart card. In future, it

should grant the poor to have bank accounts to use the smart card to its limits in case of adoption of cash transfer system.

CHAPTER THREE: METHODOLOGY

This chapter will examine the approach used in this study to illuminate its central questions about the reasons that pushed the GOE to implement the smart card project in Egypt. Before applying the new smart card system, discussion about food subsidy in Egypt was difficult and controversy regarding number of respondents and who got what. No one knew about the real numbers, and most beneficiaries complained about the quality and shortages of rationed commodities.

To study the effectiveness of smart ration card plans and implementation in Egypt, I used case studies and interviews to conduct the analysis. I used structured interviews in order to help guide the question order. The interviews were conducted with the top management and administrators responsible for the food subsidies program in Egypt to know the recent developments made and what are their future views and plans. I chose those people as they have a clear vision of the whole project and they are also the key figures responsible for applying the new system. This enriches the research with the views of how to improve the program administration and efficiency and prevent mismanagement and corruption.

I conducted the interviews by visiting the offices of the chosen program officials after assigning certain dates with their assistants. These structured and semi-structured interviews try to capture the complexity of the smart card issue. Our interviews covered issues ranging from program adoption and implementation to program review and any lessons learned. I used my personal contact to access to hard-to-reach and elites who administer the program. The interviews include the officials from the Ministry of State for Administrative Development (MSAD) and Ministry of Social Solidarity (MOSS).

I selected three governorates in order to investigate the developments of the new program. The three governorates are: Helwan, Giza, and Cairo. Helwan was selected as a representative for fully automated governorates. Giza and Cairo were selected as representatives for under-processing governorates. The work in these two governorates will finish by June 2010¹². Extensive interviews were held with key figures working in Solidarity Mudiriyyas subsidiary to MOSS. For details

¹² See Table (4) page: 65.

of list of respondents and interview questions, refer to Appendices (B) and (C) respectively.

Field visits were also applied in order to examine application of the pilot project in Suez Governorate. Some merchants were also interviewed in order to stand on how the program is being executed and to view their opinions about the new system. During these interviews, the new system applied was observed through following up how the beneficiaries purchase their rationed allotments and interact with the new system. In addition, to learn the attitude and opinions of subsidy beneficiaries towards the new system, some of them were interviewed.

Moreover, I reviewed many articles, both in Arabic or English, and policy memos, and used multiple sources of information to explain the circumstances under which smart card is operating. Using multiple method approach might increase reliability and validity of our findings, however still it is difficult to generalize the findings.

Furthermore, the laws governing the smart card adoption and application in Egypt were analyzed in detail and critically reviewed. A full background of legal framework is incorporated in Appendix (A). As a

new application for rationed food commodities is designed in light of the new applied laws, a form of this application is annexed in Appendix (D).

In order to help readers understand all details of the new system, explanatory panels were incorporated when applicable. The Indian experience in applying smart cards to help improve and organize its subsidy program was compared to what happened in Egypt.

Moreover, studying smart card is interesting and new. I found little written data in the literature about application of smart cards in Egypt. Therefore, without these interviews, the research would not have been completed. However, to conduct an interview with high ranking officials in Egypt still represents a great problem that should be overcome. This problem is basically represented in having reliable data from them. For example, we would have thought about constructing a table about geographical distribution of ration cards in order to examine the degree of concentration but officials refuse to give us the required data. In addition, I make use of the data available from different sources, including the Ministry of Social Solidarity (MOSS) and the Ministry of Finance (MOF).

I concluded the thesis with the evaluation of the smart card system in Egypt in light of the ten measures applied by Bryson for Strategy Change Cycle (SCC). According to Bryson (2004), the SCC becomes a strategic management process to the extent that it is used to link planning and implementation and to manage an organization in a strategic way in an ongoing manner. The ten steps of SCC can be summarized as follows:

(i) Initiate and agree on a strategic planning process, (ii) Identify organizational mandate, (iii) Clarify organizational mission and values, (iv) Assess the external and internal environments to identify strengths, weaknesses, opportunities, and challenges (or threats), (v) Identify the strategic issues facing the organization, (vi) Formulate strategies to manage the issues, (vii) Review and adopt the strategies or strategic plan, (viii) Establish an effective organizational vision, (ix) Develop an effective implementation process, and (x) Reassess the strategies and the strategic planning process. Finally, I end the thesis with the main conclusions and recommendations.

CHAPTER FOUR

ADAPTATION OF SMART CARD SYSTEM IN EGYPT

This chapter will illustrate the disadvantages of the old paper ration card system in Egypt. The beginning of new smart ration card application in Egypt will then be traced in detail, giving an explanation of the new system and the mechanism of its work. The chapter will end by exploring the legal framework of the new smart ration cards.

4-1- Old Paper Card System versus Smart Card System

The old ration paper card system relies mainly on the honesty of shopkeepers and their commitment to keeping records. In order to receive the regular allotment of subsidized commodities, people were asked to buy the required commodities from the specific shops where their names as well as their quotas were registered in the records. Under these circumstances, any person¹³ could sign for commodities received in the records, regardless of whether or not that person purchased or received them, and the shopkeeper would sign on the paper ration card of the recipient.

¹³ Not necessarily the person designated to receive the rations, and in this case the most probable person to do so is the merchants themselves.

The paper system was responsible for some problems, such as cases of abuse and fraud. The main thorny problem was whether the right people had their assigned allotments. In the most common scenario, the shopkeeper would sign on behalf of the beneficiary and receive their commodity allotments then sell them on the black market to gain an economic rent. When the beneficiary asked for their quota, the shopkeeper could claim that the allotments were returned to the solidarity offices subsidiary to the MOSS. It was very difficult for the beneficiary or MOSS to challenge the shopkeepers' claims and prove otherwise. The other main problem characterizing the old paper system is the inability of MOSS to calculate its real stock of required commodities¹⁴.

The new card system tackles all these problems. It identifies whether the people purchase their assigned commodities and register the date and place in which the transaction is processed. On the other hand, the MOSS can oversee the stocks and control the distribution of subsidized commodities. This means an increased ability of MOSS to track the distribution of subsidized goods and the stocks available at the

¹⁴ Meeting with the General Manager of Family Card Project, MSAD, on October 20, 2009.

shopkeepers or the MOSS. According to the MOSS officials¹⁵, by this new technique, the GOE saved about 20-25 percent from the stock given to the groceries when applying the new smart card system. This is the amount that is assumed to leak from the old system of ration cards due to the lack of the means to control it.

4-2- The Threshold of the New Smart Ration Cards

The GOE aims to continue to subsidize basic commodities while making improvements in the system of subsidy allocation. Currently, the food subsidy allocation does not differentiate between the wealthy and the poor. The government aims to introduce smart card technology, which was first used on a pilot basis in Suez, to ensure that subsidy is limited to the needy groups thus releasing additional resources for other uses.

The new smart ration card system is a technological development from the paper cards in an era characterized by technological advancement. Smart cards are a kind of data mechanization similar to automatic teller machines (ATMs) and they are more suitable in saving time and effort of the customers. Moreover, the smart cards can greatly

¹⁵ Meeting with the Advisor to the Minister of Social Solidarity for Information Infrastructure, on November 11, 2009.

help provide subsidies only for those who deserve them and prevent fraud or leakage to the rich.

Figure (4): The New Smart Family Card



Since 2005, Egypt started to provide the smart ration cards in order to help people get their subsidized products and to prevent fraud by selling subsidized goods at the black market and leakage to the rich. The smart ration card system does help in tackling the problem of leakage from grocers to the black market, i.e. fraud problems. Under the old system, the grocer signs at the end of every month in behalf of those who do not buy their items in order to resell them at the market prices and

make use of the price differences. Currently, the whole cycle between beneficiaries and grocers is managed electronically and this leakage was prevented. The GOE is preparing to control the other cycle between grocers and the wholesalers.

The GOE studied more than one experience and then concentrates on the Chinese model¹⁶. Then the Chinese model was simulated and executed in Egypt in collaboration with the Chinese Government. In first the stages of the project, all of its components were Chinese made: the card chips, technology, design and points of sale (POS) were all Chinese.

4-3- Explanation of the New System

Now the new plastic smart cards are replacing the paper system which was used by about 40 million Egyptians to purchase subsidized basic food products. The smart card contains an embedded chip holding data about the monthly quota assigned to the cardholder's household from

¹⁶ The model was on dealing with smart card applications. In 2004, Chinese authorities began replacing paper national identification (ID) cards with electronic identity cards. The paper national ID cards contain information regarding a person's nationality, birth date, identification number and the region of birth. The new digital ID uses smart ID technology. The embedded microchip in the plastic card stores an individual's personal information as well as data of all government services beneficiaries receive. The information can be read and checked against databases kept by China's security authorities. By the end of 2006, 800 million cards were in use (Virmani, 2007).

subsidized goods. The smart ration cards assure the real number of family members registered to receive subsidized goods. Therefore, the records were refined from great numbers of people who are not eligible to receive food subsidies (dead or immigrant people for example)¹⁷.

The basic components of the smart ration cards are similar to the systems of *point of sale* (POS) and *card issuing service* that are adopted worldwide. The smart ration cards comprise of seven basic systems¹⁸.

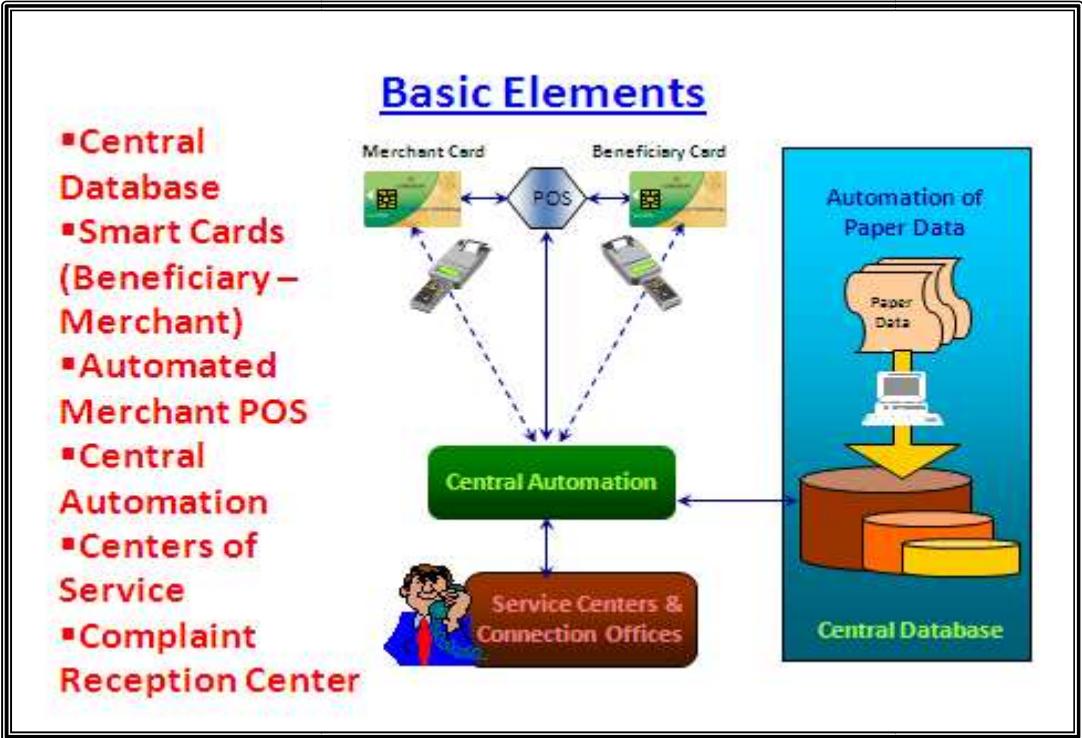
The Merchant system is the first system, which is an integrated system to employ and administer a number of ration merchants and to connect them with the computers at the Solidarity Offices. The second system is the Point of Sales (POS), which is also an integrated system to employ and administer a number of POS machines with the possibility of connecting them with the computers at the Solidarity Offices. The third system is the Card Issuing Service which is responsible for issuing the smart family cards. This service is executed by local companies (such as Smart Cards Applications Company) with the help of MSAD officials. The companies

¹⁷ Meeting with the Advisor to the Minister of State for Administrative Development, on October 19, 2009.

¹⁸ Al-Mal Newspaper, 24/11/2009.

will be registered in Egypt and will work in collaboration with an international company specialized in issuing smart cards.

Figure (5): Basic Elements of Smart Card System



Source: MSAD, Unpublished Data.

Settlement and Reconciliation is the fourth system. It is a financial system dependent on central databases to provide the base for dealing with the net. It will register all daily processes and transactions in order to regulate the value of goods purchased and issue required and guiding reports. The fifth system is the Center for Smart Card Support. The Center is equipped with units of administration, technical support, training, and maintenance. It is also responsible for supporting both users

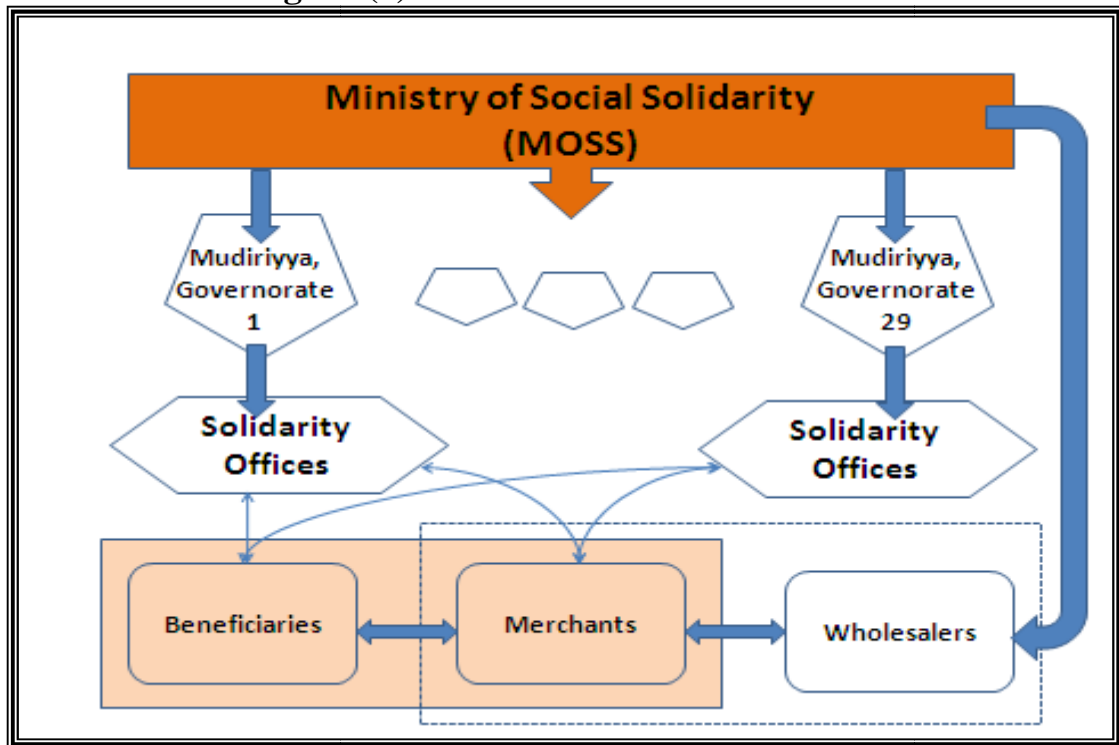
and beneficiaries. It follows up the smart card issuance and daily transactions of beneficiaries. It contains an integrated system to register, follow up and update the data of smart cards and furnish card holders with their PINs.

The sixth system is designated for Rationed Commodities. It is a financial system which depends on central databases of MOSS and constitutes the base for registering and computing all assigned rationed goods (price and quantity). This will be on different levels: beneficiaries, merchants, solidarity offices, stores, central zones, and the governorate as a whole to deal with the central net in order to register all daily dealings and transactions to control the value of sold goods. The last system deals with the Maintenance of the Systems and Basic Components. The suppliers specify the sufficient measures for securing the system performance including the security measures adopted by merchants, the security measures adopted by solidarity offices and mudiriyyas and Public Authority for Rationed Goods (PARG). Security measures will also include database transaction failures, preparing automated spare copies, and authentication system among cards of citizens, merchants, automatic readers, and the whole system.

4-4- Mechanism of the New System

The mechanism of how the smart cards work is very simple. Under the new ration card system, each designated Point of Sale (POS) receives a special card reader and a merchant card that is updated each month with the quotas of the individual cardholders assigned to that outlet. The merchant card remains in the card reader. When purchasing subsidized goods, the citizen inserts their subsidy smart card into the reader and enters their unique personal identification number (PIN). Buttons on the card reader represent the four products: sugar, cooking oil, rice and tea. The citizen presses the corresponding button to select the food stuff and quantity they wish to purchase, then another button to complete the transaction.

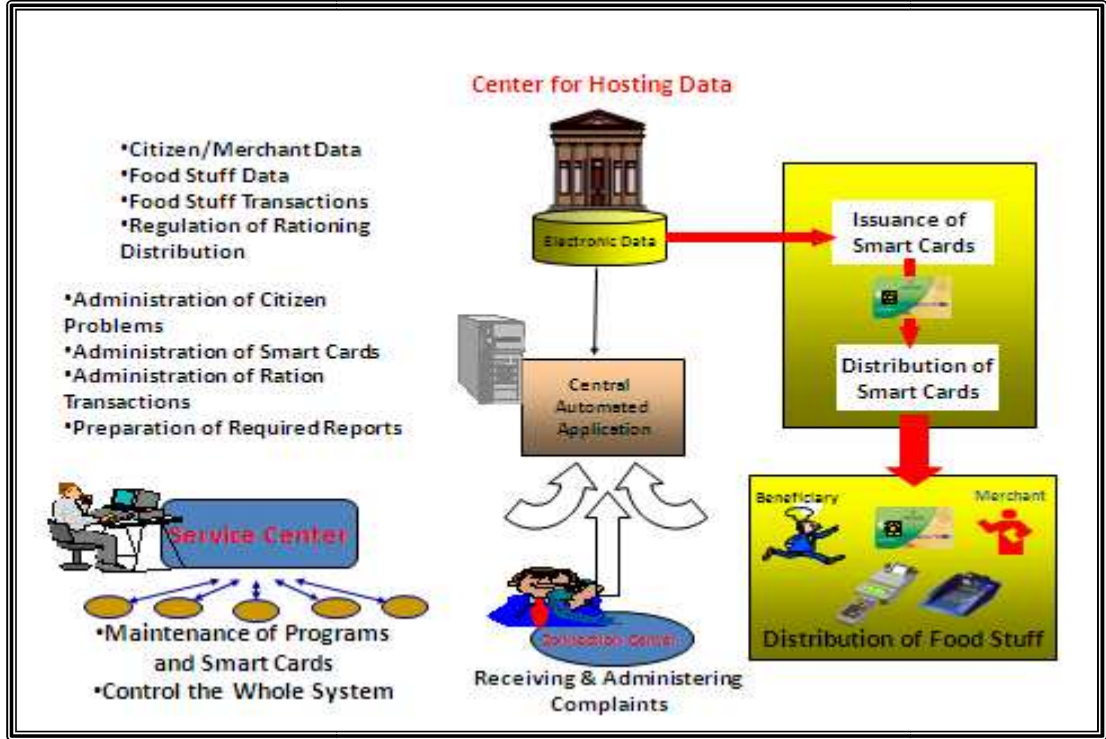
Figure (6): Mechanism of Smart Cards



The purchased quantity of each commodity is deducted from the cardholder's monthly allotted quota. If any quantity of this quota remains, the cardholder has the right until the end of the month to make use of it. At the same time, the already used quantities are deducted from the merchant's quota, enabling them to replace disbursed quantities for the next month. This transaction, therefore, is recorded in both the citizen's smart card and the merchant's smart card. The citizen can complete receiving their monthly allotment at any other time during the same month.

This technique enhanced efficient tracking of the commodity stock. It enables the authorities to know exactly who received the rationed commodities, what is the quality and when the transactions taken place. At the end of the month, the merchant visits the subsidiary solidarity office in order to validate the transactions taking place during the previous month and to update the quotas in their merchant card allowing them to receive the due quantities for the next rationing from government-affiliated distribution suppliers.

Figure (7): System of Smart Ration Cards



Source: MSAD. (2008). Annual Report. Egypt: MSAD.

The number of beneficiary households from food subsidies in Egypt is about 12 million smart cards, benefiting about 63-64 million people in Egypt or more than 82 percent of total population, (NDP, 2009). The aim is to register all citizens and then filter out those who are not eligible to receive subsidized food.

Actually, there are many positive sides for smart ration cards, the most important of which are: overcoming the fraud by grocers and wholesalers or the leakage to the parallel market. The other main positive side is the saving in the subsidies' budget. According to the MOSS officials¹⁹, the Suez Governorate, for example, saved about 22 percent of the subsidy cost by adopting the new system. In Giza Governorate, the efficiency increased by about 30 per cent. The whole country saved about 20-25 percent. The new system also helped all people, whether grocers and beneficiaries, especially the poor though they are often illiterate, as they can use the E-smart cards without being cheated by the merchants.

The other positive sides are: the system was greatly simplified by using coding system; the beneficiaries know now the amounts due and

¹⁹ Meeting with the Manager of Solidarity Mudiriyya, Governorate of Giza, on November 12, 2009.

how much they will pay; increasing the number of beneficiaries from 70 percent before applying the new system to be 90 percent of the total registered households now; and the government exerts efforts to improve the quality of goods, and increase the quantities of these goods, and finally to increase the number of chosen goods to be offered through this system²⁰.

Moreover, the new system enables building an integrated database for families that will facilitate the achievement of the dimensional database. The use of smart cards also means the availability of a good database supported by an information system for the whole households. The available database can help build good policies and indicators; enabling government to make better decisions. The other benefit represents in spreading the culture of using the smart cards, i.e. the technological awareness of citizens was greatly improved. The use of smart cards improves the technological index of the state as a whole. The technological system and infrastructure were built and can be used in providing other governmental services. The monthly payment by

²⁰ The meeting with the Undersecretary, Manager of Solidarity Mudiriyya at the Governorate of Giza, on November 12, 2009.

merchants and commodity suppliers is very good for reviving the Egyptian internal market and creating employment opportunities.

In addition, tighter measures and ability to track the transactions discourage shopkeepers from manipulating the system as previously done. They also make the stocking system more efficient. Merchants no longer have to buy all their stock at once at the beginning of each month. Now the merchant needs only to add quantities deducted from the stock they have from the preceding month. Under the less controlled old system, the merchant had to buy all their monthly stocks at the beginning of each month regardless of what stock they had from previous months.

The most important negative point of smart ration cards is the incompatibility with the Egyptian culture. The culture of the Egyptian people could be represented in this motto: Rush and take your rights as you never know what will happen tomorrow. The first days of application the new ration system witnessed increasing crowding as people were afraid of distributing all foodstuffs through this new facility. The other negative points are: continual of the intensive crowds in the first days of disposing the subsidized goods each month as the new system does not help in this regard; the great long lines of customers; and people spend

hours on lines, elbowing each others, which revives the fears of the return to the socialist era.

4-5- Legal Framework of the New Smart Ration Card Program

The amounts saved or gained from applying the new automated system enabled the MOSS to add new beneficiaries to the subsidy program. The MOSS issued a Ministerial Guidance no. 2 of 2008 to start registering any children born since 1988, who had never been added to ration cards. This was followed by the Social Solidarity Ministerial Decree²¹ no. 7 of 2008 to add any new children since 1988 to 2005 to the effective household ration cards. The reason behind decree no. 7 is to include all eligible households or household members who did not have ration cards, with the aim to provide a safety net umbrella to all the poorest households to combat soaring food prices and to prepare for carrying out the selection criteria (targeting mechanism) in the medium term. The initial aim, therefore, is to correct data about Egyptian households and then set forth the proper criteria to determine eligibility

²¹ The ministerial decree is much stronger than the ministerial guidance, and is usually published in the official gazette. This explains why the MOSS issued the Ministerial Decree no. 7 of 2008, as the main purpose was to provide a legal basis for the Ministerial Decree no. 2 of 2008.

for different kinds of subsidies. The decree does not include children born after 2005 due the lack of resources required to cover their food subsidies.

However, there will no future additions of households unless there are some slots open due to death or migration of the current number of ration card holders. New entries will replace the deceased or migrant ones. Cancellation occurs by removing the deaths or immigrants²². The other case for cancellation of ration cards is stated by the Ministerial Decree no. 64 of 2009 which modifies the first article of Decree no. 483 of 1987. According to the new article, the right of the ration card holder to take their allotments will be rescinded when they do not take their basic and supplementary goods during the month of distribution. The ration card will be cancelled and removed from MOSS records when their holders do not take their goods for a period of six successive months.

The MOSS sets some criteria to add people to the ration card system. In this regard, the Social Solidarity Ministerial Decree no. 84 of 2009 outlines the regulation of issuing new cards for most vulnerable

²² However, there will be room to add new population through the new categories stated by the Social Solidarity Ministerial Decree no. 31 of 2009 amended by Social Solidarity Ministerial Decree no. 84 of 2009

groups. According to this decree, ration cards shall be issued for some certain cases, which are (i) Those who are eligible for social safety, Sadat, and Mubarak pensions; (ii) The widowed, divorced homemakers or breadwinner women; (iii) Those of chronic diseases and those of special needs; (iv) Temporary and seasonal workers, agricultural laborers, peddlers, ...etc; (v) Minors who have no supporters or permanent income due to the death of their parents; (vi) Pensioners who were working for government, public business, or private sectors whose pension does not exceed LE 750 monthly; and (vii) Employees of government or public business sectors whose salary does not exceed LE 1000 per month.

A large percentage of ration card holders is among the less vulnerable categories. Under the new regulations applied by the MOSS, most vulnerable people were allowed to apply for a new ration card. Highly vulnerable households are less likely to register all members. They preferred the new smart ration card system, but called for improvements in the quality of the goods. In all cases, each ration card will be limited for only four people per family²³ and no other members

²³ Although this provision appears a deterrent for new children, the Ministerial Decree no. 84 of 2009 stated new categories that may include the other family member who will not be added to the ration smart card, especially if we take into consideration that the children born in 1988 will be now about 22 years of age.

shall be added to the ration cards after issuance. The previous criterion will also be applied, i.e. new ration cards will only replace the rescinded ration cards (because of death, travelling abroad, or double registry).

However, the ministerial decree in the clause no. (vii) does not specify what is meant by the employees' salary (it should not exceed LE 1000 decree 84): whether basic or total. It is well known that basic salary for government and public business sectors employees greatly differs from total salary. In this case, people will deserve subsidized goods when use their basic salary while they will not be eligible for them upon using the total salary.

Up till now, the MOSS does not exclude any person from receiving ration cards based on any criteria. However, according to the MOSS officials, studies are being conducted to select a clear base for excluding the better-off from receiving subsidized goods. Among these criteria: having one feddan of agricultural land; having two cars; having a flat in luxurious areas; or having more than one governmental employee in a household. This criterion may also be the invoice of telephone or electricity when exceeds some certain limit.

In this chapter, we discussed in detail the old paper ration card system and compared it to the new smart system. Then, the application of the new smart system in Egypt was thoroughly explained. Then we offered an explanation of the new system and its mechanism. Finally, the chapter concluded with the legal framework of the new ration card program.

CHAPTER FIVE

IMPLEMENTATION OF SMART CARD SYSTEM IN EGYPT

In this chapter, objectives of smart cards will be discussed in detail. Then the pilot project applied in Suez Governorate will be explained. After that, how the lessons of this pioneer project were utilized in generalizing and revising the smart card project in whole Egypt will be explored.

5-1- Aims of Smart Cards

In order to facilitate the implementation of the new program, the MSAD has embarked on a phased E-Government Project with the twin goals of improving the flow of information between government bodies and complementing government automation and service delivery efforts. Spearheaded by the Ministry of Information and Communication Technology (MICT) with the cooperation of all ministries, the project intends to bring all government services for citizens online within the coming years and make service delivery, procurement and administration more efficient (Omar, 2008).

The initial aim behind the application of smart ration cards by the GOE is to target the poor, by granting subsidies for those who are eligible for them. The other primary goal of the new card program is to improve the distribution of subsidized commodities and to ensure that they are reaching those who need them most or those who deserve them. The new program seeks to close the loopholes in the existing system without abandoning the principle of supporting limited-income citizens. The GOE then thought about adding some other services on the smart cards to benefit the people more, especially the poor. The GOE, therefore, piloted the smart card system before implementing it nationwide.

The actual application of this system, however, differs somewhat from the stated objectives. Smart cards are issued now for all households, poor or rich. Nevertheless, the GOE may aim to register all households' members into the new system and then select the proper subsidy level suitable for each family. This step cannot be implemented without the availability of the entire automated system and reliability of its data.

The other objectives of the project are: to guarantee provision of subsidies to the most vulnerable households; to establish the internal control of fraud and abuses of subsidies; to create a humane environment

for providing the service; and to provide proper information to define the family profile. Also it encourages Egyptian households to adopt the good habits such as being honest instead of adhering to some bad habits; to achieve transparency needed for interaction of the citizens; and to allow accurate, up-to-date, and timely data and information to support decision making.

5-2- The Pilot Project of Suez Governorate

In mid 2005, the GOE commissioned a consortium of information technology (IT) firms to conduct a four-month pilot project in Suez governorate to test the new food-subsidy smart card to assess the public's response towards it. Suez Governorate was selected as a model governorate to provide this service, in order to be generalized to all other governorates in case of success. It is worth mentioning that Suez Governorate was selected to perform the pilot project because it has 147 distribution outlets as well as 83,000 paper ration cards benefiting 263 thousand people, associated with five food supply offices, who all are using smart cards instead of the paper cards (Helmy, 2005). The food items covered in the smart card now are two basic in addition to four supplementary commodities. The partial subsidy system was replaced by total subsidy.

Beneficiaries were issued the smart cards which contain a variety of information about the household and the available rations for subsidized goods on a micro processor imbedded in the card itself. The national identification database is used to incorporate such information as the number of family members, birth and death information, and other eligibility criteria.

In conjunction with card readers, the cards automatically verify the eligibility for the rations and the amounts transferred, and permit accurate payments to food merchants. In order to receive the new ration cards, citizens had to fill in applications and provide information including the number of members in their family, average family income and designated grocery store dealing with government. For detailed information on household data, see the smart card application form in Appendix D.

To select goods for distribution through ration cards, the MOSS observes the behavior of people towards the purchase of chosen goods and selects the most required goods. In the past, the MOSS offered seven goods: sugar, cooking oil, rice, tea, lentils, beans, and pasta. The Suez

project allowed the MOSS officials to be fully aware of the consumption patterns of the Egyptian families, especially those of limited income resources. For example, they discovered that the demand on some certain subsidized commodities is much higher than others. This enabled the MOSS to remove the commodities that have little demand from the ration card system and make use of allocations to be directed for commodities in high demand²⁴.

Therefore, some certain goods, such as lentils, beans and pasta, were removed from the ration system and the concept of supplementary goods was initiated to give more quantities from sugar and cooking oil as they were demanded most. A more flexible commodity mix, therefore, was suggested consisting of sugar, cooking oil, rice, and tea. This was also an opportunity for the use of smart cards in its current form. As the Suez pilot project gained great success as considered by the MOSS and MSAD, it was decided to extend this trial to all other governorates to help improve the subsidy system.

²⁴ The MOSS, therefore, now distribute only four rationed commodities: sugar, cooking oil, rice and tea.

5-3- Smart Ration Cards from a Pilot to Nationwide Project

Satisfied with the results of the Suez pilot project, the GOE has begun expanding the project’s scope to other areas of the country. A private consortium was commissioned to handle the technical aspects of the project and has begun issuing subsidy smart cards to applicants in Port Said, Beni Suef, Sharqiya, Menoufiya and Sohag governorates, the City of Luxor, and in ex-Cairo’s Maadi district²⁵. Officials hope to provide 12 million subsidy smart cards to cover approximately 63-64 million beneficiaries nationwide by the middle of the this year.

There were many lessons learned from Suez Governorate Pilot Project: The MOSS offers now only four goods: two basic and four supplementary commodities. The basic goods are sugar and oil and the supplementary sugar, oil, rice, and tea. The monthly quantities and prices per smart card holder are shown in Table (3):

²⁵ Now affiliated to Helwan Governorate.

**Table (3): Quantities and Prices of Subsidized Goods Offered
Monthly through Smart Ration Card System**

	Subsidized Goods	Monthly Quantity per Person	Subsidized Price (LE)
Basic Goods	Sugar	1 kg	0.60
	Cooking Oil	1/2 kg	0.50
Supplementary Goods	Sugar	1 kg	1.75
	Cooking Oil	1 st 1/2 kg	1.75
		2 nd 1/2 kg	2.50
	Rice	1 st kg	1.00
		2 nd kg	2.00
	Tea	50 g (1 packet)	0.65

Source: The MOSS, unpublished data.

Based on Table (3), the maximum quantity²⁶ for *supplementary* goods for each household of a four-member smart ration card is as follows: 4 kilograms for sugar, 2 kilograms for oil, 8 kilograms for rice, and there is no ceiling for tea. The quantities provided through ration cards cover 19 days of household monthly consumption of sugar, 23 days for oil and 11 days for rice (IDSC, 2005b). Smart ration cards provide very vulnerable households with 60 percent of their consumption of sugar, 73 percent of oil consumption, and 40 percent of rice consumption (El-Nakeeb, 2009).

²⁶ These quantities are for a household of 4 people. Quantities may differ for cards of families with fewer than 4 members.

Those merchants dealing with smart ration cards are registered by the MOSS to receive ration stuff from government wholesale companies. At the beginning, each grocer has to register a number of ration card holders wishing to deal with them. This number should be not less than 400 and not more than 1,000. The grocer records monthly purchases of food stuff on the ration card.

When MOSS increased the prices of supplementary goods from the prices of their counterparts of basic goods, this leads to regulate the market and lessen the gap for appearing a black market. The need now is to move the prices of basic goods offered through the ration cards in order to stifle the black market as the gap is too large between subsidized and free market prices, especially after the world sugar crisis happened last September 2009.

By using smart ration cards, compared to the paper system, the MOSS gains some advantages: (i) Eliminating fraud by merchants, (ii) The GOE makes use of unsold goods, (iii) Consumers know prices and quantities of the subsidized goods (Previously merchants were advising consumers not to purchase the subsidized goods for their bad quality in order to get benefit from them), (iv) Disposal of subsidized goods is

perfectly controlled under the smart ration cards (As previously said, when the beneficiary does not take their goods up till 6 months the card will be rescinded).

It is expected that the smart-card system will decrease costs of ration subsidy administration, including reducing errors such as multiple ration cards for individual households and potential fraud involving merchants. It is estimated that the smart card system can decrease the cost of providing subsidies by 20-25 percent, implying a savings of LE 1,000-1,200 million annually²⁷. Moreover, smart ration cards reach to the poor in the slum areas. The MOSS has its grocers all over the country. The grocers are available in each district, even the slum areas. Slum areas have their merchants. The new process will be to replace the paper ration cards with the smart cards. As the illiteracy will not constitute an impediment for dealing with numbers, there will be no problem upon applying the new smart cards in slum areas.

The MOSS has some difficulties upon applying the smart ration cards, the main of which are: (i) To change the culture of the MOSS

²⁷ Based on data of Table (2).

employees, grocers and citizens in order to use the new system, (ii) There were some merchants who refused to apply the system. Later, they were trained to adopt the system, (iii) All technical problems were minor and quickly solved. The system was adopted in 20 governorates, (iv) To make beneficiaries aware of not to leave smart cards with the merchants for fear that merchants may gain from them.

The MSAD conducted a study in 2006 and found that merchants receive just 1.5 percent profit from the sale of subsidized goods. This low margin was the key reason why some merchants abuse the system by resorting to fraud and making enormous gains (Omar, 2008). The study's findings prompted the GOE to come up with an incentive aimed at dampening the appeal of the black market. Therefore, merchants also greatly benefited under the new smart card system. For example, they take the tonnage of basic oil for LE 920 and get margin profit of LE 80 per ton. They are also granted one Egyptian pound monthly per each ration smart card that passes through their point-of-sale (POS) machines. If, for instance, 400 citizens purchase their quota of subsidized goods at a grocery in a month, the grocery owner will receive LE 400 cash from the GOE other than the other normal profits.

In Egypt, there are 17 million families, 12 million of which deserve receiving food subsidy through the smart card system according to MOSS officials²⁸. Table (4) shows that the smart ration card system will hold a total of 12 million ration cards, representing a total number of 63-64 million beneficiaries. After the MOSS reopened registration for the new smart system, about 23-24 million people have been included and added to the 40 million persons of the prior system. The MOSS finished now applying the new system in 16 governorates. The other remaining governorates are expected to be finally equipped with the new system by the end of December 2009 and June 2010, respectively, as shown in Table (4):

²⁸ Meeting with the Advisor to the Minister of Social Solidarity (MOSS) for Information Infrastructure, held on November 11, 2009.

**Table (4):
Status of Smart Card Application in the Egyptian Governorates**

Status	Governorates	no	No. of Cards
Fully automated	Suez, Port Said, Beni Suef, Luxor, Sharqia, Sohag, Monufia, Helwan, Dakahlia, Ismailia, Damietta, Aswan, Qena, North Sinai, South Sinai, Red Sea	16	5,152,144m
Under processing, expected in December 2009	Alexandria, Beheira, Qalyubia, Matruh	4	2,049,988m
To be finished by June 2010	Cairo, Giza, 6 th of October, Kafr el-Sheikh, Gharbia, Faiyum, Minya, Asyut, New Valley	9	4,815,208m
Total		29 ²⁹	12,017,340m

Source: The MOSS, unpublished data.

The GOE succeeded for the first time in shifting the cost of the whole project of applying smart cards as well as all administration aspects to the contractors. The GOE adopted the outsourcing policy. The contractors pay for building, execution, management, and maintenance of the program. As for selecting the contractors of goods, the MOSS deals with some governmental companies as well as private suppliers and merchants. Holding Company for Food Industries (FIHC) greatly assists in this regard. Sugar, for example, comes from the local governmental companies (primarily from the Egyptian Sugar and Integrated Industries

²⁹ The gradual application of the project in the governorates takes the following order: 1 (the pilot project), 3, 2, 1, 9 (the first 16-governorate stage), 4 and 9.

Company - ESIIC) and the remaining amounts come from importation.

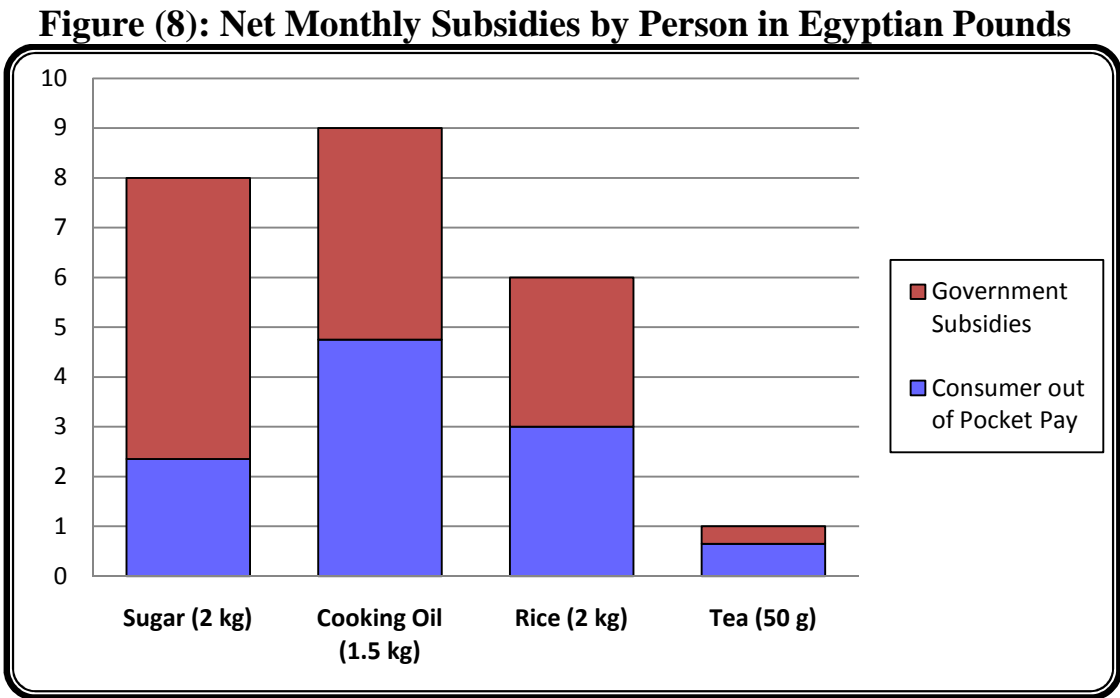
The General Authority for Supply Commodities (GASC) makes payments to the FIHC for the domestic quantities. Most cooking oil comes from importation. Imports are mostly in the form of crude oil or semi-refined, to be refined or completely refining locally. Rice comes from Rice-Mills companies. Tea is totally imported. Then MOSS entrusts some companies to fill according to the required weights and to distribute them to wholesalers all around the country. The wholesalers then distribute them to the merchants³⁰.

Egypt can develop the whole subsidy system through the technical tool which can be used in many applications. For the first time, the subsidy system can be discussed with an evidence base. Policy makers can now take the proper decision concerning subsidies. However, they consider this is a political matter which is better to be left to the President himself.

The use of modern technology enables subsidy control and use of cash transfer program in future. There was difficulty to select certain

³⁰ The meeting with the Manager of Supplies, Solidarity Mudiriyya, Governorate of Giza, held on November 9, 2009.

criteria to determine who can benefit from cash transfers. However, after applying the smart card system, the cash transfer payments can be applied without the previous fraud and corruption. The monthly payments directed for each person can be easily calculated. On average, a person in a household holding a ration cards pays only LE 10.75 per month³¹ as shown in the following figure:



Note: Free market prices fluctuate from time to time.
Source: Calculated from data in Table (3).

³¹ This figure is based on data presented in Table (3).

The actual amount of subsidy given by the GOE per person is LE13.25 per month³². This amount can now be easily given to people in cash without enforcing them to take some certain commodities that they might not need. However, this amount should be pegged to the general price level in order to exclude the inflation effect on the poor and low income groups. The GOE plan is not simply to administer ration cards, but also to facilitate the application of subsidies and other government services. The new smart cards will not be confined to submission of food subsidies. They will be also a part of a greater system that the GOE is trying to implement, which is called the family card project.

Figure (8) reveals that the state subsidized the sugar most (about 70 percent of its total price). By directing these great amounts of subsidies for sugar, the state favors bad nutritional habits of the people. It is advisable that the state chooses another healthier commodity package to be subsidized.

³² This figure is the difference between market prices of rationed commodities and prices at which they are offered through ration cards. The market prices prevailed during December 2009 for rationed commodities were: LE 4.00 / 1 kg sugar, LE 3.00 / 1/2 kg cooking oil, LE 3.00 / 1 kg rice, and LE 1.00 / 50g tea.

Under the family card project, any subsidy will only be offered in future through the family card. The digital storage capacity of the smart cards will be utilized to store personal data of the card holders and their family members in order to get basic government services. According to this storage capacity, the number of offered services will be determined. The services may include the current food ration subsidies in addition to some other several projects, such as medical insurance (a pioneer project started in Suez), social solidarity pension, subsidized gas cylinders, cut-rates for transportation subscription (such as trains, public transportation or underground), family control services and education³³.

The most important lessons of smart ration cards that can be delivered to other countries trying to apply the same policy are: giving priority to the social dimension before the technical one. The social dimension is taken into consideration in everything related to the system. In the past, the profit margin of the merchant was only (1.5-2 percent); encouraging them for fraud. Under the new system, the grocer gain one Egyptian pound for every smart card processed through them. This gives success for the whole project. The design of the whole system is a success

³³ Nazif Demands to Accelerate Issuing Family Ration Cards. (2009, December 1). *Al-Ahram Newspaper*, p. 7.

story. Any grand project should start with a pilot project, and that is what happened in the smart card project in Egypt as started by Suez project.

CHAPTER SIX

EVALUATION OF SMART CARD SYSTEM IN EGYPT

The purpose of this chapter is to find out to what extent the smart family ration card project adopts a strategic plan when it was applied. To achieve this purpose, the project was studied and analyzed according to criteria set by Bryson in his Strategy Change Cycle (SCC). We concluded that the smart family project adopts a sophisticated strategic plan. In addition, we discovered that the application of this strategic plan matched to a great extent Bryson's SCC. As Bryson sets out ten key points in his Strategy Change Cycle (SCC), we will now evaluate the smart card strategy plan according to these points of SCC:

Step (1): Initial Agreement:

The smart card was a result of an initial agreement between MOSS and MSAD, which leads in end to the application of the new system in about 20 governorates and it is expected to apply the new system in the remaining 9 governorates by end of June 2010.

Step (2): Mandates:

Ensuring that subsidies will be directed for eligible people and having an updated and comprehensive database for the Egyptian society. In order to fulfill its mission, the family card project has been entrusted with a broad and multi-sectoral mandate. The strict regulation of the project allows it to carry out its functions, which are: (i) Ensuring that the government is giving subsidies to eligible people, (ii) Providing citizens with a civilized environment to receive different services, (iii) Determining the geographical, qualitative and quantitative consumption patterns of the Egyptian households, (iv) Promoting the Egyptian household to get rid of negative habits, and (v) Furnishing the decision makers with reliable, updated and timely data.

Step (3): Mission and Values:

The smart card project has very clear mission and values as stated in its aims. The mission is represented also in studying the new system, setting a vision for technical solutions, and following up the execution and operation processes. Smart card project is a part of the National Project for Building Family Database in Egypt. The latter is in turn a part of a greater program to complete and connect national databases. The vision of the project is to merge all national databases in order to unify

basic information of citizens and investors, to ease data exchange among different entities, and to provide precise and updated information to help decision takers.

Step (4): SWOC Analysis:

The smart card project stated clearly all the internal and external factors that play pivotal roles in its course of life. A strengths, weaknesses, opportunities, and challenges (SOWC) analysis is outlined below:

Strengths:

The main strengths of the project are: (i) Starting with a pilot project to be generalized after success, (ii) Outsourcing in fields of execution, operation, administration, and maintenance, (iii) The citizens will not bear any additional expenses, (iv) Adopting centralization policy in application and decentralization policy in execution, (v) Using a unique smart card to offer different services, (vi) Re-engineering the work cycles before application, and (vii) Building a complicated database with continual updating of its sources.

Weaknesses:

The weaknesses are represented in: (i) Illiteracy rate is very high, especially in rural areas. This may endanger the whole smart ration card program as a technological project requiring a minimum educational background; (ii) The number of laws and decrees about food subsidies to be amended or implemented in order to give birth to the smart ration card program is very high; (iii) The increasing number of violence when calling for subsidy reform; and (iv) A Black market will arise from adoption of commodity price discrimination under the smart ration card project.

Opportunities:

The main opportunities are: (i) Offer opportunities to the private sector companies to share in implementing the new system, (ii) Make use of the support by the United Nations organizations to extend safety nets for the most vulnerable groups, and (iii) Make use of the World Bank and IMF criticism of the current system to share in the cost of applying the new system.

Challenges:

The challenges can be summarized as follows: (i) Reliable survey for households eligible for subsidies, (ii) Cultural behavior of rationing providers (employees and merchants), (iii) Low technological background of system users (employees, merchants and beneficiaries), (iv) Ensuring that employees and merchants are correctly providing the required service, (v) System sustainability, (vi) System insurance, (vii) System security and secrecy, and (viii) Building trust among citizens and the system.

Step (5): Strategic Issues:

The smart card project gives top priority to strategic issues and goals. Below we will concentrate on the most important two of them:

(1) The first strategic issue is: *Ensuring that subsidies will be directed for eligible people.* This issue is a strategic for several factors: (i) The main goal of food subsidies is to help the most vulnerable groups. By ensuring that these subsidies will be directed for the proper people, the government then succeeds in achieving this goal, (ii) When the subsidies leak to the rich, they will not achieve what we intended from them as they are originally designed as a safety net tool aiming to help the poor, and

(iii) The GOE will lessen the great burdens on its budget. These funds can be allocated for other projects.

The consequences of failing to address this issue: The state will not be able to get its economic and social development. The poverty levels will remain without change.

(2) One of the major strategic issues for family card project is:

Having an updated and comprehensive database for the Egyptian society. There are many factors making this issue strategic for the Egyptian society: (i) This database will not be confined to the family cards. It will be used in all other services provided by the government to the people, (ii) This database will help decision takers to have a clear vision that will enable them during decision making process, (iii) This database will help the government to direct the proper allocations to the needy regions in the country.

The consequences of failing to address this issue will affect negatively the performance of all Egyptian organizations and institutions. Any official decision will not have sound bases and may harmfully affect broad sections of people.

Step (6): Strategy Formulation:

The executive policy of the project depends on some facts: (i) Starting with a pilot project, (ii) The execution is made on phases not to include the 29 governorates at the same time, (iii) The division of the project takes into account covering all governorates and not concentrating on the urban governorates, and (iv) Providing the required budgets.

Detailed studies were then conducted in order to examine the new system. A study about the grocers' behavior and why they resort to fraud the system was made. They were granted one pound for each ration card they will process in order to compensate them. Another study about beneficiaries and to what extent they will be able to use the smart cards was also carried out. The results of these studies were taken into consideration upon designing the smart card. The technical specifications of the card reader machines were chosen in order to suit the Egyptian nature (for example, not to be broken when they fall down).

Step (7): Strategy and Plan Review and Adoption:

All steps of the family smart card were taken according to the hierarchy of the MSAD and finally were directed to the Minister himself to have the proper decision. A Unit for Technical Solution Reviewing

was established in the MSAD to be responsible for reviewing any technical solution suggested for any stage of the project.

Step (8): Vision of Success:

The vision of the family card project is to provide the Egyptian citizen with a unique smart card through which they can receive the different governmental services in a more civilized and developed way and at the same time enables the GOE to control, guide and take rational decisions. The vision of the project was to finish the infrastructure required for automating all subsidy services during five years, starting from June 2005. The project succeeded in this vision, as it is expected to complete the whole project by the end of June 2010.

Step (9): Implementation:

The MSAD and the consortium were responsible for actual implementation. At the same time, cooperation was made in parallel with the MOSS to cover the business requirements, such as cost and number of commodities and number of merchants.

Step (10): Strategy and Planning Process Reassessment:

The officials of family project try to solve all problems that may arise during execution, such as passwords of beneficiaries and test programs that do not perform well. Although there are no written documents setting out all these procedures, they are all implemented.

In Conclusion, The mission statement sums up the essential purpose for which the project has been set up. The overall mission of family card project is to enhance the status of the poor and most vulnerable groups and maximize their contribution to the social, economic and political development of Egypt. This mission statement is embodied in the Social Solidarity Ministerial Decrees concerned with the issuance of family cards. The project has a very clear vision and succeeded in implementing it within the time limit. This project is considered one of the most successful national projects in Egypt and expected to completely change the subsidy map without any fear of societal disturbances. The model of this project is recommended to be applied in similar national projects that touch the life of the Egyptian citizens.

CONCLUSIONS AND RECOMMENDATIONS

The Egyptian case illustrates two general lessons about safety net policy. The first is how hard reform can be, especially of general subsidy systems. In this case, it is better to make some partial reforms that will lead in the end to reform the system as a whole. The second is that not all expenditures made in the name of safety nets are equally efficient or defensible. This is because of the cases of fraud or corruption.

The Egyptian food subsidy suffers from two kinds of loopholes: one leakage during the distribution of food stuff, which can be better called fraud, and the other leakage to the parallel market. In the first loop, Egypt greatly succeeded in lessening the fraud to its minimum through the audit system inherent in the program. Egypt now continues this process by regulating the relation between wholesalers and merchants. This process will be automated and therefore the fraud will greatly diminish. However, it is recommended to have some external auditors to examine that allotted rationed stuff is really directed for their eligible people. This examination may be made through random sampling as it will be difficult to be applied nationwide.

The new subsidy smart cards system is being implemented under a public private partnership (PPP) between the government and a consortium of private companies handling the project's technical application. The procedure is to have a bid and to specify in the request for proposals that the company that wins the bid for this project would bear the cost of building all the infrastructure for the project including but not limited to call centers, the hardware required for the points of sale (POS), the network necessary to connect the groceries to the solidarity offices and so on.

In return, the private partner makes a profit from each smart card transaction. Every month when a citizen puts their subsidy smart card in a POS machine, the government credits the firm one Egyptian pound for each month's transaction. This is a very good arrangement. The GOE built a system with no initial investment where it pays LE 1 per every month's transactions, controls the quantities given out to consumers, combats the black market business that was run by the groceries, and has a database of all the beneficiaries. It is a great development that is enabling the GOE to improve the service provided to citizens.

The great advantage achieved in the family card project is that Egypt has now an information infrastructure for its huge population base. This has been done through a great effort. This infrastructure will regulate all services offered through the GOE in future. However, the system still needs all citizen documentation and national data to be integrated and connected together. This will lead to lessen the fraud greatly. For example, when passport data are connected to the smart ration cards, all ineligible people for being abroad will be automatically excluded from the system.

The application of smart ration card system in Egypt is considered as a transition stage after which the cash transfer system may be adopted in order to make the social safety net in Egypt more effective and efficient. Despite the new decrees issued, there are still some people not eligible to obtain ration cards. The MOSS can diversify the distribution system by giving some people cards with limited quantities at slightly higher prices.

Decree no. 84 of 2009 states that "employees of government or public business sectors whose salary does not exceed LE 1,000 monthly" can have a family card entrusting them to receive subsidized food stuff.

However, the decree does not state whether this salary is basic or total. In Egypt, the basic salary totally differs greatly from the total salary. This decree will permit people not eligible for subsidies to have them. It is recommended to modify this law by stating that "the total salary should not exceed LE 1,000".

It is suggested to revise eligibility criteria to eliminate some categories (e.g., pensioners, public business sector) while introducing more poverty-focused criteria similar to proxy-means testing and geography. Additional criteria, such as illiteracy or residence in rural Upper Egypt, could also be added to the list in order to improve targeting. Indeed, the same criteria used in cases of cash transfers – such as proxy-means testing and/or geographic targeting – could be applied to the ration-card program.

The subsidized goods should be available at the grocers from the beginning of each month in order to prevent the fraud by sellers. In reality people go to take their goods and do not find them. The grocers ask them to come later at other times during the same month. At last, people feel fed up and leave their goods for the grocers to be sold by them at market prices. The grocers gain the difference between the two prices. However,

this case will be eliminated by the end of June 2010, when all the system will be automated all over Egypt.

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APPENDIX (A):

THE LEGAL REGULATION OF RATION CARDS IN EGYPT

The main ministerial decisions organizing the smart ration card system in Egypt can be traced as follows:

- 1) The Social Solidarity Ministerial Guidance no 2 of 2008 on 15/1/2008 which was followed by:
- 2) The Social Solidarity Ministerial Decree no. 7 of 2008 on 28/1/2008 concerning the Addition of Children born since 1988 up till 31/12/2005 for Effective Ration Cards
- 3) The Social Solidarity Ministerial Decree no. 64 of 2009 on 19/8/2009 about the cancelation of ration cards of beneficiaries when they do not take their allotments for three consecutive months
- 4) The Social Solidarity Ministerial Decree no. 31 of 2009 on 28/4/2009 concerning Issuance of New Ration Cards for Most Cared Categories which was mended by
- 5) The Social Solidarity Ministerial Decree no. 84 of 2009 on 29/9/2009 concerning Issuance of New Ration Cards for Most Cared Categories

The new system of smart ration cards is now applied in 20 governorates. This system is expected to be applied all over Egypt in the middle of 2010.

APPENDIX (B):

LIST OF INTERVIEWEES

- 1- Dr. Samy Saad Zaghlol, Secretary General of the Egyptian Cabinet (December 16, 2009)
- 2- Dr. Ashraf Abdul-Wahab, Advisor to the Minister of State for Administrative Development (October 19, 2009)
- 3- Dr. Magdy El-Hennawy, General Manager of Family Card Project, Ministry of State for Administrative Development (MSAD) (October 20, 2009 and December 15, 2009)
- 4- Eng. Noha Kopttan, Advisor to the Minister of Social Solidarity (MOSS) for Information Infrastructure (November 11, 2009)
- 5- Mr. Abdullah Badawy Abou El-Magd, Undersecretary, Manager of Solidarity Mudiriyya, Governorate of Giza (November 12, 2009)
- 6- Mr. Adel Mohamed Bakr, Manager of Supplies, Solidarity Mudiriyya, Governorate of Giza (November 9, 2009)
- 7- Mr. Abdul-Rahman Salama Kinawi, General Manager, Solidarity Mudiriyya, Governorate of Cairo (November 4, 2009)
- 8- Mr. Mohamed Abu Zaid, Manager of Financial Affairs, Solidarity Mudiriyya, Governorate of Cairo (November 3, 2009)
- 9- Mr. Sa'aid Nassar, General Manager Ration Cards, Solidarity Mudiriyya, Governorate of Helwan (November 10, 2009)
- 10- Mr. Mohamed Abdul-Rehim, Managing Director for Financial Affairs, the Egyptian Sugar and Integrated Industries Company (ESIIC) (October 26, 2009)

APPENDIX (C):

**AGENDA FOR MEETING WITH KEY EGYPTIAN OFFICIALS
RESPONSIBLE FOR RATION SMART CARDS**

Please give a brief explanation for the new smart ration cards of food subsidies in Egypt.

How did Egypt start thinking in applying the smart ration cards?

What are the reasons behind the application of smart ration cards by the GOE?

What is the experience on which Egypt depended when adopted this system?

What are the most important positive points of smart ration cards?

What are the most important negative points of smart ration cards?

The number of beneficiaries from food subsidies in Egypt is about 12 m cards, benefiting about 63-64m people in Egypt (or about 87 percent of total population). Why does the GOE provide food subsidies for this great number of population?

What are the criteria to join people to get use of food subsidies?

What are the bases of excluding the better-off from the food subsidies?
(Having 1 feddan of agricultural land – having 2 cars – having a flat in
luxurious area – having more than one governmental employee in a
family)

What are the bases to issue new ration cards for people working in the
government or public sector?

What are the bases to select goods for distribution through ration cards?

Why does not MOSS adopt the cash transfer system?

What is the cost of food subsidies now?

How does the MOSS save by using smart ration cards compared by the paper system?

How will the smart ration cards reach to the poor in the slump areas?

What are the main difficulties of applying the smart ration cards?

What are the other benefits of the smart cards?

How does the MOSS select contractors of goods?

How does MOSS distribute the selected goods to the grocers?

How does MOSS overcome the illiteracy of grocers and beneficiaries?

What are the main results achieved by MOSS upon applying smart cards?

How can Egypt develop the whole subsidy system? How can Egypt develop the smart ration cards in particular?

What are the most important lessons of smart ration cards that can be delivered to other countries trying to apply the same policy?

What are the main ministerial decisions organizing the smart ration card system?

What are the governorates applied the smart ration cards? When will this system be applied all over Egypt?

At the end, are there any available studies about applying the smart ration card system in Egypt?

Do you recommend any specific person that van be met in order to add to this topic?

Can I refer to you again in case I want to clarify any other matter?

APPENDIX (D):

RATION CARD FORM

Ministry of Social Solidarity

Solidarity Mudiriyya at Governorate of -----

Application for Ration Card Services

To the Director of Solidarity Office at -----

Name of Applicant: ----- Address: -----

No. of Civil Card: ----- Place of Issuance: ----- Date: -----

Job or Occupation: ----- Place of Work: -----

Applicant's Monthly Salary: -----

Other Monthly Incomes (if any): ----- Source of these Incomes: -----

Work or Solidarity Mudiriyya Authentication: -----

In case the Applicant own a car, please mention the number of its Cylinders: -----

No. of Ration Card: ----- No. of Individuals: ----- Name of Merchant: -----

Please tick (√) before the required service:

▪ Issuance of a New Ration Card in separation of a Valid Card because of:

Marriage: ☐ Divorce: ☐ Living Alone: ☐

People Arriving from Abroad who Previously Removed from Family Card: ☐

The Only Alive Member of a Family: ☐

▪ Issuance of a New Partial Ration Card for Travelling of Family's Head Abroad: ☐

▪ Issuance of Replacement for Loss or Damage: ☐

▪ Re-Issuance of Deleted Card for the Following Cases:

Not Receiving Allotments: ☐ Returning from Travel ☐

▪ Transferring the Card from an Office to Another inside or outside Governorate: ☐

Details of Family Members

No	Name	Relation	Profession	Income	No	Name	Relation	Profession	Income
1					6				
2					7				
3					8				
4					9				
5					10				

I declare that written data and required service are correct, and that I am eligible to receive a ration card for (partial/total) subsidies. In case it comes to notice at a later date that particulars given by me are either incorrect or contrary to truth, I shall be fully responsible for all resulting legal actions. In this case, I shall return the price differences of all received ration stuff.

Applicant's Signature: -----

Date: ----- No. of Application: -----

Filled By: ----- Head Office: -----

For Office Use Only

I, -----, received the application of -----, for -----.

The application is truly filled and paid for being processed. The application is registered under no. ----- and dated --/--/----

Signature: -----