Strengths, weaknesses, and threats of targeted subsidy plan in agriculture

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In this article, we review the literature on strengths, weaknesses, threats and opportunities of the Targeted Subsidy Plan, and its positive and negative consequences. In addition, the practitioner and professional opinions about the Targeted Subsidy Plan and the results of its detailed implementation are analyzed. The most important results obtained from the survey are based on descriptive statistical data, comprising the families' income and the number of their members. In this article, the information was gathered by library method and the whole article is arranged the following way: history, definitions, types of subsidies, the main methods of paying subsidies in different countries, political purposes behind the Targeted Subsidy Plan. The plan has already raised the liquidity too high that it created an inflammation of 35%; although, the lower deciles seem to be more satisfied.

Keyword: Subsidy Plan, Strengths, Weaknesses, Threats of Targeted

INTRODUCTION

The Targeted Subsidy Plan (or Subsidy Reform Plan) is one of the projects established by Iranian Government to support the social vulnerable classes with the aim of reducing the income difference between upper and lower deciles in the society. The major goal of this plan (passed by the parliament as a law) was to improve equality, making rational the energy prices, preventing from fuel smuggling, and educating the society on managing the optimum consumption of fuels. Different governments have adopted special and varied policies in terms of making targeted subsidies based on their economic system.

Types of Subsidies

Any kind of transition distribution of cash or goods from treasury (or anything that could be added to it) to producers and families, in order to support low-income classes, is called subsidy.

1. Direct cash subsidy
   This kind of subsidy is paid in cash and its purpose is to increase the targeted families' income.
2. Direct value subsidy
   This kind of subsidy is in form of coupons with a limited value, given in special cases to the targeted families.

Indirect Subsidy: in this case, the price of goods or services is redefined lower than their real price. This kind of subsidy is used by all the society.

Basically, when is the government required to make interferences in order to further support the social vulnerable classes? How effective are these interferences? And how can its government measure visible and invisible in order to eliminate its negative side from businesses? In other words, is the government allowed to interfere in the economic markets, and if yes, what are the boundaries of this management or surveillance? Adam Smith, the founder of Economy and an English economic theorist of 18th century, believed in Invisible Hands of market, implying that the market would eventually modify or settle itself based on supply and demand cycle.

The world has experienced supporting the social vulnerable classes in different ways such as cash distribution system, commodity distribution system, coupon system, and costing communal system. In the following, we introduce these economic policies briefly.

Under this system, the cash subsidy is distributed by one of two methods, direct or conditional.

Direct cash subsidy is the assistance "in cash" given to
the poor and those under anticipated risk of becoming poor without the payments. In other words, economically we can imply that the more the income, the more the feasibility set. It must be emphasized with respect to the advantages of direct cash subsidy that it disturbs the costing system less than other systems, and extends one’s options more widely.

The direct cash subsidy is attributed to people under some conditions. The poor have to invest the money in human capital areas such as sending children to school or using preventive healthcare services in an orderly way. The aforementioned method has its flaws and merits. In terms of conditional cash subsidy its worth mentioning that it is behaviorally conditional, i.e., not only the family’s income must be below a predefined limit, but also they must accept some predetermined conditions. Most developing countries have argued that their aim is human capital aggregation.

The flaw of cash subsidy system is that it rises up expectations in all the society and makes targeted subsidy plan implementation difficult. Also, this system increases the liquidity and then, the prices of subsidized goods go up. So inflammation would be inevitable and the income distribution would go against the vulnerable classes (targeted groups). Because these classes, unlike the more affluent ones, do not have income transitions.

According to the World Labor Organization (WLO), more that 80 percent of the industrial world have been given one kind or another of cash subsidies in 2002, while in Asia and Africa it was only %10. This quantity was announced to be %15 to %60 in Latin America, %20 to %25 for the middle-income countries of northern Africa, and %50 to %80 for the transitional countries of Eastern Europe. Among developing countries, only a few distribute < %1 of their GDP to the poor, while this is %8 in OECD (Organization for Economic Co-Operation and Development) countries.

Totally, cash subsidies have a much lower amount in developing countries than transitional and developed countries. The main reason of the issue is the budget constraints in developing countries. Besides, policymakers in these countries give higher priorities to public costs that reduce the limitations of economic growth structure than to systems which raise the consumer demand or income transition. In other words, in these situations, cash subsidies are helpful only in short term and wouldn’t show a long-term effectiveness. Another reason of differences in the payment of subsidies is “information”.

History of Making Targeted Subsidies

The producer subsidies in Iran date back to Safavieh; in that period there was some kind of financial discount. Later on, in the Kingdom of Ghajar, it was decided to develop agriculture by giving seeds and grants to the leaseholder. However, direct government interference in supply and demand (production) was first seen in 1311. Iranians first experienced a rationing system with subsidy distribution in the World War II, although in the 40s there were subsidies to wheat and meat. The amount of these subsidies was very low before the rise of crude oil prices. In Mordad, 1353 the government created a Consumer-Aid Fund, which turned into the Association of Producer and Consumer Protection (APCP) in 1356. After the Islamic Revolution, changes were made to the structure of the Organization and the methods of goods distribution. In addition, because of the economic limitations made by the War and sanctions, which gave rise to unsteady productions and imports, in 1360 an extended pricing system was established by APCP, and supporting policies were widened. All the classes were helped in some way.

After the Islamic Revolution, making targeted subsidies first came to the fore in the First Development Plan of 1368, but it was cancelled in practice. Despite the emphasis of the second Development Plan on continuing subsidy distribution, but the Development Government took an opposite policy called the economic compensation (pricing according to daily Dollar rate), which raised the prices so high that a %50 inflammation was observed; so, the government retreated from this policy.

The Islamic Parliament modified the Bill 46 of the Third Development Plan in 1380 in order to adjust the subsidy structure, according to which the government was obliged to study the details of making targeted subsidies, basic goods and energy carriers. However, practically this plan wasn’t implemented. In the third and fourth development plans, the subsidy reform plan never took priority in the governments of the time. So paying much more attention to this Plan is undoubtedly one of the major differences of 10th government with prior ones.

Goals and Policies of Targeted Subsidies Plan in Agriculture

Around a third of the GDP is currently attributed to invisible subsidies (price discount for energy carriers) and visible subsidies (the amount of fund predicted in annual budget for basic goods such as bread and flour). Because these goods are delivered cheaper than their real price, some issues have been observed; the most important among which are:

Reckless consumption, which gives rise to lower resource productivity and lower economic growth.

Dissipation, which disturbs economic growth

Extending the price gap inside and outside the country, which leads to the growth of smuggling.
Agriculture is the fundamental structure of economy, which provides the food for other sectors. So the economy can only grow if this sector is developed.

One supporting policy that the governments make is the distribution of subsidies. The agriculture section needs subsidies too. Concerning its risky environment, agriculture deserves more attention. Research shows that the subsidies to agriculture make up only a fraction of all subsidies paid to the sector. Among all production subsidies to agriculture, the insurance subsidy paid to the farmers is technically justifiable.

Overall, production subsidy is an amount of fund that government pays in order to make goods and services cheaper for the consumer. Studying the production and services subsidies structure shows that in Iran, unlike most countries, there is a high percentage of consumer subsidies. The amount of subsidies to agriculture in 1388 was R8550 billion, which was attributed to fertilizing, seeds, tractors, combines, optimizing the toxin consumption, development of agricultural activities, healthcare development for cattle, rural cattle feeding and breeding, cattle vaccination, toxins and disinfectants, and biological material.

Growth of agricultural sector needs government support, which in this respect has made use of the following policies:

- Subsidying the facilities and loans for investment
- Pricing the guaranteed purchase of crops
- Putting constraints on importing agricultural crops
- Subsiding the agricultural crops exports
- Providing free of charge promotional and developing services
- Awarding compensation in case of natural disasters
- Subsidizing the agricultural insurance
- Infrastructural investment to develop rural areas

Increasing the share of subsidies to this sector and improving management would elevate the productivity. So the subsidies and productivity synergically improve each other to make the need for government help less prominent.

The driving force behind private investment in agriculture is fundamental support of the government itself. Also, increasing the amount of targeted loans (especially low-interest) would improve investments in agriculture.

A point to remember in Subsidy Reform Plan is prioritizing; for example, instead of rapid elimination of subsidies to electricity for farmers, it is reduced stepwise and is made reasonable within 10 years.

The policy of fixing the exchange rate is actually a macroeconomic policy which has affected agriculture by rising imports and lowering the prices for exports (which is a negative sign for exportation). Fixing the exchange rate has its flaws and merits; on the one hand, it lowers the price of agricultural items (the lower the exchange rate, the more benefits the producer will have), but on the other, exporting competitors will encounter problems; importing machineries with low-priced Dollar is desirable but importing the final product would be a disaster for domestic production.

More than %31 of agricultural added value attributes to the subsection of animal husbandry; so optimizing this subsection may improve the production standards of agriculture.

Major Economic, Social and Political Benefits of Targeted Subsidy Plan

- Lowering the smuggling of goods due to price gap
- Decreasing the government costs (i.e. decreasing the bureaucratic costs which can be omitted for direct subsidy)
- Making a more powerful private sector due to the fact that the government stops producing the items
- Increasing the investments in the unsubsidized goods (ex. tires, washing machine, cement etc.)
- Lowering the consumption of subsidized goods to a balanced level
- Decreasing the environmental impact (reducing the air pollution due to significant consumption of oil products)
- Rising the quality of unsubsidized goods
- Using state of the art technology with "real" prices
- Equal distribution of subsidies (now, %20 of the whole population, use %50 of fuel subsidies. But when the cash subsidies are distributed, the poorest decile may use 20 time more of subsidies than the wealthiest decile, since their population is 20 times bigger)

Production after Subsidies

Mentioning the parliamentary law of targeted subsidies, according to which %30 of the income earned by higher fuel prices may be given to private sector as low-interest banking facilities, Iranian Chamber of Commerce Chief Executive pointed out that in order to control prices, the government can compensate higher fuel prices gratuitously, although nothing has been done up to this point. The Targeted Subsidy Plan has produced T14000 billion revenue so far; which gives a law slope of %60 according to the total revenue of T54000-56000 billion. The law of making targeted subsidies has a 5-year cycle. The main difference in the law implementation is between production and domestic consumption sectors, which may change overnight. For example, the heating system of a house may be improved in a short amount of time and with low prices, but on a production line, this may require changing technology, machinery and R&D investment, all of which are time consuming. Therefore, the manufacturing sector may be given enough time to
achieve the primary goals of minimum inflammation and maximum productivity. The manufacturing sector cooperated very closely with the government in psychological management; however, to face the truth, we must mention that increasing of the production items price and rising of inflammation is reflected either in the final price or in the supply curve. In other words, the total supply was reduced and by raising the demand, prices went up. In the current situation, a dual-priced system may be observed, with which, experiences are negative. All pressures are now on the shoulders of producers. We can identify these pressures and help the producing sector (Nahavandian, Iranian Chamber of Commerce Chief Executive).

Every target needs timing. So scheduling is the fundamental part of the Targeted Subsidy Plan. We have 5 years to implement the subsidies law, so the plan given to the producers cannot be strict. The major goal of managing the exchange rate is to prevent importing inflammation. In Iran, imports are multiple times more than exports, and %70 of imported goods are capital and intermediate ones. The export to GDP ratio must be analyzed. If we are going to reach the ambitions of independence of oil, making the exchange rate reasonable must pay more attention to exports than to imports. Our GDP value with respect to PPP is now $870 billion, while the imports value is $70 billion. So we are sacrificing %90 of population for the sake of %10. Government is the institute which provides exchange (or currency), so its market may not be competitive. Since we are still not a WTO member, more care must be given to exports.

**Evaluation of the objectives of Targeted Subsidy Plan**

The goal of consumption pattern modification was achieved by price changes (increase slope). Despite population and continuous economic growth, raising the exports etc, all of which increase the consumption, in all sectors, from fuel to flour, to electricity etc, consumption growth became zero or negative. The first 11 months of The Plan, made a $15.2 billion revenue. So, undoubtedly the implemented policy gave rise to reduction of the energy consumption and increase of the productivity. This amount of money is only the direct effect of the Subsidy Reform Plan. With the reduction of oil, gas and fuel consumption, there is no need for the $8 billion import of these products. Or with the %8 growth in electricity consumption turning into a %2 reduction, we may enjoy a $10 billion a year saving in power stations investment.

**Overall Effect of the Targeted Subsidy Plan - Especially in Agriculture**

With respect to inflammatory effects of the Plan, we only need to compare with the criticism made upon it. The inflammation for a 12-month period leading to Azar, 1389 has been %10.1; this amount in Aban, 1390 was %19.8. In other words, if all the factors remain constant, the added inflammation has been less than 10 percent. This was despite the fact that state enterprises like the Ministry of Economic Affairs and Finance predicted a %12 inflammation. However, the critics of The Plan, who managed the related research institutes, alluded to an inflammation of %60 – 70 and even %500. Another important point is that future inflammation spikes shouldn’t be attributed to the Subsidy Reform Plan, since the price increase related to the Plan has been merged in the first 6 months and amortized during the year. So, other inflammations may result from rising of the exchange rate, etc.

Central Bank has announced that the Economic Growth Rate for 1389 was %6.1 without oil and %5.8 with oil. Continuous growth has reduced the unemployment rate from %13.6 to %11.1 in the second quarter of 1390 compared to the same period of 1389. But why wasn’t the predicted depression observed? First, it may be the result of managing the factor assignment and improvement of technology base in producing units, although this area needs more time. Second, supporting the manufacturing sector by energy subsidy, energy grant etc. has had a major role. Third, it was due to the business support policy. Effective tariffs have reached %11.7 in the first 10 months of the year, compared to the %10.8 of the preceding year. Import dollar rate has increased from 1033 to 1073 Tomans (an increase of %4). These figures show at least a %12 business support. Fourth, the rise of energy prices in Iran has been comparable with other parts of the world in the same period. This leads to maintenance of competitive advantage of energy items in Iran. Fifth, operationalizing big industrial projects in the country. Sixth, a significant growth of agriculture (%8.8).

The abovementioned factors not only led to more economical growth, but also created a better growth in energy sector than the average of the country. For example, petrochemical production in the nine moths leading to Shahrivar, 1390, compared to the same period in the preceding year, improved %11.8, steel and it products %11.58, cement %12.7 and clinker %13.6.

These figures are reflected in stocks. For example the sales (and profit) rate of basic metals has been %35.
(%25), petrochemical materials % 28 (%42), oil and gas extraction %19 (%17). Totally, the stocks index has raised from 18 thousand to 25.5 thousand units. Economic growth (GDP to the annual fixed prices of 1376) in 1389 was as follows: Central Bank evaluation: agriculture: 8.8, mining and industry: 9.3, oil: 1.9, services: 4, total: 5.8, total (without oil): 3-63.1.

Even one case of social disturbance wasn’t reported. That’s because: the idea of disturbance buzzes or rumors wasn’t based on psychography and anthropology of Iranians. Second, the Subsidy Reform Plan was accepted as a national project. Third, the payments were effective and more than the average cost increases for the majority of the population. Fourth, informing people, prognosis, and due payment of subsidies resulted in acceptance of the Plan. Accordingly, a number of sessions were held even with the presence of the President and Ministers for some groups like trades union and transportation sector. Fifth, numerous sessions of Subsidy Targeting Association has been very useful in lowering the pressure. The whole attempts mentioned above led to criticism in evaluation of the effectiveness of the first phase of the Plan. There are some significant but different subjects on the issue, which will be followed. Steep price modifications in the first phase. The slope of the price changes was among the significant issues of the first phase. Despite the emphasis among some members of the parliament, the government refused to assign the prices or a numerical ratio for them. So the energy prices were determined according to technical and economical considerations and some assumptions which proved to be true. The oil price was defined in all analyses to be at least $80. So based on a Dollar rate of R10000 the determined to targeted price ratio, according to the type of energy used, was %8 - %50. Only one energy carrier (with rationing) had a ratio of %92. Overall, the carrier prices lifted from $5 an oil barrel to $32.

A national, instead of individual, cost-profit analysis. One cannot conclude that Targeted Subsidy Plan had equal effects for all the individuals and sectors without any problems. Modification of the manufacturing structures, consumption patterns, and importantly improvement of income distribution was actually based upon prices and price ratio reform in order to optimize resource allocation processes and redistribution of the subsidy surpluses. However, in these projects we may analyze the policies beyond the short-term periods and benefits beyond the monetary issues. A significant example is a R160000 billion saving in around 11 months compared to a remaining fund of R63000 billion in 14 months of the previous year. In the first 14 months of The Plan, %75 of payments was regarded as funds, while this is now reduced to %14. This shows that even the resource – consumption balance must be analyzed in medium-term.

The Targeted Subsidy Plan hasn’t been much effective in agriculture. On the one hand the final price of agricultural items was increased due to the energy higher prices, and on the other, the crop prices didn't raise as much as other goods like gas, electricity, fuel etc. Therefore, the production price has risen multifold while the crop prices didn’t go up as much. This leads to decreased production and increased need for importing the agricultural crops.

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